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VOL. VIII.

EDITED BY

The Honorable JOHN MILDRED CREED, M.L.C., L.R.C.P., M.R.C.S.E., &c.

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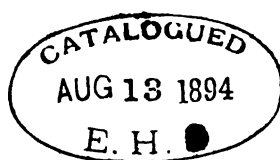
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## ORIGINAL ARTICLES

## THE PRESENT POSITION OF THE SUPRA-PUBIC OPERATION, WITH A CASE AND ANALYSIS OF 67 OTHERS.

READ BEFORE THE N. S. WALES BRANCH, B.M.A.

BY GEORGE EDWARD TWYNAM, L.R.C.P. LOND.,  
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I HAVE endeavoured to condense a question which has been exercising the surgical mind for some time past, viz. : when to do the supra-pubic operation and when not to. With this object I have collected the notes of 67 cases of supra-pubic lithotomy, reported in the *British Medical Journal*, *Lancet*, and *Australasian Medical Gazette*, since July 1, 1886, as well as some cases amongst ourselves as yet unreported.

In the *British Medical Journal* for March, 1887, Sir William MacCormack has published an excellent article on this subject. In it a table of all the operations he has been able to collect is given, including those of the pre-antiseptic period. I have attempted to show the results among English surgeons since the steps of the operation have been better defined, and antiseptics have been availed of. I have, therefore, started from January 1, 1886, as my endeavour is to compare the modern results of supra-pubic lithotomy with the modern results of lithotomy and lithotritry respectively.

Some of the cases I have collected are, no doubt, included in his tables, and so some will overlap, but as no table of names is given, it is not possible to exclude them.

I am anxious to confine the question to the supra-pubic operation for stone simply, excluding cases of vesical tumour, and have endeavoured to give it a relative position among the various operations for stone in the bladder.

At the outset, one is met with the difficulty as to whether cases which are really limited by Sir Henry Thompson's objection that any concretion under grs. xx., which he terms gravel and not stone, should be included. With "gravel" the condition of the mucous membrane of the bladder is but little affected ; so that the risks of operation are lessened and the successes correspondingly increased.

Seven such cases are included amongst those I have tabulated.

Comparing the supra-pubic with the lateral, we find that for various reasons in cases 4, 29, 34, 43, 54, and 60 the lateral operation had to be supplemented by the supra-pubic. In the lateral the chief advantage seems to be drainage, which is a great point, though it failed in case 34 ; but I scarcely think that this one advantage is so great as to entirely counter-balance the difference in the risk of the two operations.

The disadvantages of the lateral are considerable. 1st. One makes the cut, so to speak, in the dark ; in the supra-pubic one sees all one does. 2nd. Hæmorrhage (and often secondary) is frequently met with. In these cases of S. pubic, posterior hæmorrhage is only noted once in case xxii., and I can only find hæmorrhage from the bladder veins noted once.

3. In children the risk of missing the bladder or tearing the urethra.

4. Wound of the rectum.

5. With a large stone the danger of injury to the parts, or the alternatives of crushing or doing the supra-pubic operation secondarily, as occurred in six cases.

6. Injury to the ejaculatory ducts. In reference to this point, which is treated of but lightly by some, I have found instances of 17 cases in which impotence has followed, and Sir W. MacCormack gives 17 noted by Hœmstadt, or a total of 34. At all events the boy has lost one chance of reproduction, and should he be unfortunate enough to get an epididymitis on the other side in after years, the result will almost certainly be impotence. This question suggests itself to me as one suitable for the Investigation of Diseases Committee.

In the supra-pubic operation, on the other hand, the parts cut through can be seen, and with care the peritoneum should be safe, or if wounded, may be sewn up as in cases 58 and 65, in which no evil consequences resulted. In the second place, hæmorrhage can be seen, and if sufficient stitches be used, I do not think there should be much risk of posterior hæmorrhage.

Extravasation into the tissues around is noted as occurring in 11 cases in all (Nos. 2, 4, 9, 18, 19, 22, 25, 45, 48, 51, 58), but the length of time in hospital is nearly doubled. Extravasation is by no means unknown in the perineal operation.

By the supra-pubic, stones of all sizes, as well as foreign bodies, can be removed and the bladder thoroughly explored. I know of an instance in which a second stone was removed from the ureter by this means.

In examining these operations, I must refer to the statistics of Surgeon-Major B. C. Keelan, who seems at present the chief advocate of the lateral, and though his statistics of 188 cases with only 8 deaths are remarkable, his opening sentence is as follows:—"The patients operated on were all healthy, so far as I could ascertain—old and weak men were not operated on, nor were persons whom I had reason to suppose to be suffering from any organic disease." He has certainly added some very useful points in practice in favor of the lateral.

His improvements are:—

1. A probang which he uses to push the stone into the best axis for removal.

2. He lays down as a rule that traction is to be made in the outlet of the pelvis, as in midwifery; and he directs the operator to stand well above the patient.

3. He says that the finger should not be inserted into the bladder in boys, but only a fine pair of forceps.

4. He reiterates the rule of cutting and not tearing. We all know how by tearing we can keep an opening elsewhere from closing, whilst here rapid closure is our object. Yet in spite of his advances I scarcely think the lateral operation will be able to hold its own in children in the face of the statistics brought forward to-night.

In litholapaxy, or lithotritry at one sitting, supra-pubic cystotomy has a much more formidable rival.

The statistics of Surgeon-Major P. J. Freyer in favor of litholapaxy are startlingly good. In dealing with this question, Sir Henry Thompson's contention as to what is a stone comes in. Taking anything under grs. xx. as a stone, his own results would be largely increased. In the 77 cases published by Surgeon Major Freyer in the *British Medical Journal*, December 24, 1887, 14 cases would come under the term of gravel; but, excepting these, 63 successful cases of all ages give a remarkable return.

The average stay in Hospital of these cases was only 5½ days, and no death.

Mr. Walsham also gives a table of *nine* cases, but of these seven come under the term of gravel, all the patients being up in a few days. He also gives a table of 22 operations performed by Surgeons Raye and Goldsmith, all of which were well in a few days. The average ages of the cases operated on in these tables were 5½ and 6½, the youngest being 1 year and 11 months. The youngest case I can find yet reported is No. 4 in Mr. Walsham's list, 1 year and 3 months. A record of 108 cases without a death surely makes one pause and consider. When one looks for a reason why litholapaxy should be so successful in children, it seems to me that the explanation is to be found in the following facts: That the children are probably healthy, and not worn out by pain; that the kidneys are healthy; that there is little or no cystitis; that the prostate is small, which is an advantage, for the difficulty of lithotritry with a large prostate is well known. Also the shape of the child's bladder which favors the discharge of fragments. It is also noticeable that no rigors or convulsions are noted. Has the undeveloped condition of the sexual organs any influence on this point?

The objections raised against litholapaxy in boys are: The undeveloped conditions of the organs; the small size of the bladder; the narrowness of the urethra, with the great sensitiveness of the parts; and, I think, one may add the difficulty of obtaining suitable instruments.

These are hardly tenable in the face of the facts adduced by Surgeon-Major Freyer and Mr. Walsham, for the small prostate is an advantage, whilst if the bladder is small, it is probably far healthier than in an adult. The narrowness of the urethra is one objection, but when the meatus is slit up, the urethra of a child of three will admit a No. 6 catheter English, whilst a boy's of 8 or 9 will admit up to a No. 10. Lately, after the removal of an urethral calculus, I passed a No. 6 English easily on a boy of 2 years.

The crushing must be very complete, quite to a fine powder, and that is one difficulty, especially in the face of the lithotritry statistics of so practised a surgeon as Mr. Cadge, who allows he gets recurrence in 1 in 6, and puts Sir Henry Thompson's recurrences as 1 in 7. (Brighton meeting). The cases published lately do not admit of recurrence having taken place.

To us, on this side of the world, the difficulty of obtaining suitable instruments will, I am sure, be a reason decidedly in favor of the supra-pubic operation, if that operation can be shown to give anything like equally good results, for lithotritry requires most skilful handling and instruments of the very best.

The results of the supra-pubic operation so far, under 10, give 1 death in 20, or a mortality of 5 per cent, with an average stay in Hospital of 19.9 days. Including the cases under 20, they give a mortality of 1 in 28, or a mortality of 3.5 per cent., but the stay in hospital is increased to an average of 38 days. As regards the supra-pubic operation, the total mortality of these cases is 10.4 per cent., as compared with 10.7 per cent. by lithotrity. (Norwich statistics).

It must be remembered that the cases reserved as yet for the supra-pubic operation are largely those which are too bad to be dealt with by lithotrity. In the cases I have tabulated 18 were hardly feasible by the lateral operation or by lithotrity, *i.e.*, about 1 in 3½ cases.

And if a result as successful as this be obtained in cases of which every fourth is too difficult to be dealt with by either of the other operations, what may be expected when the slighter cases are also dealt with by this method.

Regarding the operation itself, I think there are a few points worth noting. Some surgeons have put aside Petersen's proposal to distend the rectum, others have not thought it necessary to inject the bladder if the rectum has been distended. So far as I can find out 3x. to xii. is sufficient for the bladder in an adult, and 3iii. to iv. less for the rectum, but in a child of 6 years 3v. is sufficient for the bladder, and less than that for the rectum. Palpation really is the best guide, but I should be unwilling to use more than these amounts; for care must be taken not to over-distend the bladder, that that viscus may contract, and the catheter be dispensed with. My own feeling is to use less than these quantities rather than more in order not to run any risk of atony. It is not always necessary, if one is prepared to cut on to the point of a sound, to distend the bladder in thin persons, but in stout, I should certainly advise it.

From an experiment I made, it seems to me it makes some difference which is distended first. By distending the bladder first that viscus is like a ball, and when the rectum is dilated beneath it rises directly upwards. If the rectum be distended first the bladder folds round it, and I found it required 3iv. or v. more in the bladder to obtain the same prominence above the pubes as in the former case, judged by palpation. I think it better to introduce the bag collapsed into the rectum before distending the bladder, but only just within the sphincter, for if pushed too far in it compresses the bladder against the pubes, and may cause trouble in the extraction of the stone as occurred in a case of Mr. C. J. Bond's. After distending the bladder inflate the rectal bag—by preference a small square one which fits well under the trigone. A line which joins the internal

abdominal rings from side to side, gives about the line of the reflection of the peritoneum on the distended bladder, and is marked by a transverse ridge of yellow fat caused by the double layer of sub-peritoneal tissue.

When the bladder is reached it is advisable to put in a loop on either side of the middle line to hold the bladder up and to keep the edges apart, thus preventing the tearing of the loose cellular tissue behind the symphysis pubis on introducing the finger, a very fruitful cause of septic trouble. In case 57 I held a sound with its point against the bladder wall, whilst Mr. Hankins opened the bladder with a pair of scissors, which answered well, the bladder being nearly empty. The retaining ligatures enabled us to see any bleeding points in the bladder wall, and with this precaution experience will, I think, prove that cutting gives better results than tearing, as in the prostate in the lateral operation.

If the stone be not large, a pair of forceps is better than introducing the finger for its removal.

After removal of the stone, the most important question of all occurs: "*Should the bladder wound be sutured?*"

In connection with this point the tables I have prepared give the following results:—

Bladder not sutured	Bladder not sutured with catheter	Bladder sutured	Bladder sutured with catheter	Insufficient data	Perineal drain	Total
No.	21	14	14	10	4	4
Recovered in 8 weeks.	6	3	10	6	...	...
Deaths.	2	1	0	2	2	0
<div> <div>35 with 3 deaths.</div> <div>= Quick recoveries 9, or about ¼ of the cases.</div> </div> <div> <div>24 with 2 deaths.</div> <div>= Quick recoveries 16, or ⅔ of the cases.</div> </div>						
...	...	...	...	...	...	...

This, I think, points to the advisability of suturing in most cases. In six cases in which a catheter was used it was removed as being unsatisfactory, and in four cases in which the bladder was sutured and no catheter used, some urine escaped through the wound.

In a case of marked cystitis, with a quantity of mucus and foul-smelling urine, I think the bladder wound should *not* be sutured, unless one be prepared to do the Boutonniere operation, and drain that way.

The direction of the muscular fibres when contracting does not tend to tear the wound open, and therefore union by first intention should be our aim.

To do this, the sutures must be placed close together—not more than  $\frac{1}{8}$  of an inch apart—with one placed quite at the angle of the wound, above and below. The stitches should be passed through the muscular coats, including the muscularis mucosæ only, as in suturing intestine, without piercing the mucous membrane.

Such suturing is a safeguard against what has been termed posterior hæmorrhage into the bladder.

Dilated and atonied bladders should be drained above without suture, unless perineal drain be added. In cases 1, 3, 5, 8, 20, 39, and 52 the bladder was sutured, and no catheter introduced. These did very well, and if care be taken not to allow the bladder to become distended, I think the catheter may be dispensed with.

It is to be noted that in several cases small quantities of urine escaped through the wound, which still healed readily.

If the bladder be not over-distended at the time of operation, I cannot help thinking that, with healthy bladders, it will be found that no necessity exists for retaining a catheter, since it is apt to cause an urethritis. Cases in which this occurs at the time of operation, from the passage of sounds or otherwise, require a catheter at first, as do also cases of simple atony. In these it is essential that the instrument be aseptic, and also frequently removed, for it is very apt to become plugged with mucus, when distension follows. This point is also of great importance, even with the perineal tube. The passing of a catheter every few hours is better than tying one in, but it has the objection that, for the first time or two, it is apt to cause a good deal of straining, as in case 15. This difficulty may be overcome possibly by an injection of cocaine, and also by reducing the quantity of fluid taken.

Cases of cystitis are best dealt with by frequent irrigation through the drainage tube above.

The difficulties as yet encountered are—trouble in finding the bladder, once (case 28).

2. Very narrow pubic interval, uncovered by peritoneum, once (case 46).

3. Wound of the peritoneum, twice (58, 65).

4. Posterior hæmorrhage, once (22).

5. Extravasation, in eleven cases (2, 4, 9, 18, 19, 25, 45, 48, 51, 58).

6. Feeble cicatrix (case 12); ditto, with fistula, three times (9, 52, 58).

7. Margins of the wound sloughing, in three cases (4, 32, 38).

8. Phosphatic deposit, once (29).

9. Suppuration, once (55).

10. Cellulitis, seven times (9, 19, 25, 33, 45, 46, 58).

11. Complicated with stricture, twice (4, 28).

12. Rigors, five times (9, 16, 20, 40, 48).

13. Cystitis, twice (34, 48).

14. Slight escape of urine through wound, without affecting recovery, six times (15, 33, 36, 50, 57, 59).

Although this seems rather a formidable list, it must be remembered that one case may supply an instance of two or three of the conditions here mentioned.

The causes of death were :—

1. Uræmia.

2. No cause discoverable.

3. Double pneumonia, already commencing at time of operation.

4. Exhaustion.

5. Cellulitis.

6. Exhaustion; patient never rallied from anæsthetic.

7. Syncope, from which patient suffered for years previously.

The notes of my own case are shortly as follows :—E. M., aged 12, has had pain in micturition as long as he can remember. The stream stops suddenly, but if he lies down he is able to pass it. Urine healthy. On August 31 a medium-sized Barnes' bag was passed into the rectum, bladder washed out with warm boracic lotion, and then  $\mathfrak{z}\text{v}$ . injected to distend it. The rectum was next distended with  $\mathfrak{z}\text{iiss}$ . There was no difficulty in reaching the bladder. The peritoneum was not seen. Bladder transfixed, and held up with a loop of catgut. Bladder opened, and the stone removed with forceps. Weight, grs. cxi. Five interrupted catgut sutures united the bladder wound; soft catheter tied in. Temperature never reached 99°. On the seventh day the boy pulled out the catheter, and passed urine naturally. It was not replaced.

On the fourteenth allowed to get up. Superficial wound nearly healed. By the twentieth wound was perfectly closed; urine and micturition normal.

To sum up: I think litholapaxy for those who have the instruments will, in the future, be the operation in children under ten, for stones under  $\text{ziii.}$ , and for cases under twenty as large as  $\text{zvi.}$ , provided they be not very hard. Larger than these must be dealt with by the supra-pubic or the lateral. I think the mortality returns of these more recent cases, together with the simplicity of the operation, will induce many men hereafter to choose the high operation; and for those who have not the suitable instruments for crushing, the results shown by this table will decide them in favor of the supra-pubic operation in children.

For it must be remembered that this table represents mainly the first endeavors of many men since the revival of the operation, whereas the statistics of the lateral are the result of many years, and the outcome of some of the most practised operators.

I cannot but think that as one man does the operation more frequently, even better results will follow.

The lateral operation may be said, as a general rule, to be limited by a stone of  $\text{ziss.}$  to  $\text{ziii.}$  in the adult, without crushing, unless it happens to be very flat; whereas stones of all sizes up to  $\text{zxxiv}\frac{1}{2}$  have been removed by the supra-pubic.

Cases of foreign bodies encrusted with phosphates—cases of stricture—cases of markedly hypertrophied prostate—cases in which the hip is ankylosed, are undoubtedly best dealt with by the supra-pubic. As also cases of stones above  $\text{zi.}$  in women.

I allow freely, that the operation at present is still on its trial, but the statistics brought forward to-night show a better result than could have been expected. For the general death-rate, although many of the cases are necessarily most severe, is reduced by nearly 4 per cent., whilst under 20 it is halved. Against this lessened mortality the longer stay in hospital must be put, but this, I believe, will be very much reduced. Finally, the danger to life is greater by lithotripsy, but a more perfect recovery, provided they rally; whilst the risk to life is less by lithotripsy, but the recovery in many instances is followed by a more or less persistent cystitis; and, frequently, this operation has to be repeated or supplemented by a lithotomy.

On the one hand, statistics are said to be able to prove anything. I have, at least been honest in trying to find deaths recorded; as you will see, several are merely mentioned without the other points being filled in. On the other, it may be said successes only are published, but I think the medical profession are now alive to the fact that failures give more information to the community at large than successes, and, therefore, failures are more readily published than heretofore.

The cases brought forward to-night give the results of modern work, and should be freed from a general mortality table of all recorded cases.

It will be seen that the accepted statement of a mortality of 27 to 30 per cent, is hardly borne out by the results of modern surgery. On these grounds I cannot but think that eventually the supra-pubic operation will supercede the lateral, and in very many instances take the place of lithotripsy.

AGES.	No. of Cases.	No. of Deaths.	Average Age.	Average stay in Hospital, in days.	Average Mortality.	Lateral Lithotomy (Norwich Statistics) Death Rate.	Lithotripsy (Norwich Statistics) Death Rate.	Surgeon-Major P. J. Freyer. Lithotripsy. Death Rate.
10 years and under ...	20	1	Years. 4.8	19.9	5%	...	...	...
Over 10 years and under 20.	8	0	16.5	38	all under 20. 3.5%	8%	...	...
Aged ...	30	4	{ R. 43 D. 59 }	38.6	13.3%	...	...	...
Insufficient data to classify. (Included with aged).	9	2	...	...	15.3%	19%	...	...
TOTAL ...	67	7	...	...	10.4%	13.3%	10.7%	3.7%

R. = Recoveries.

D. = Deaths.

## RECORD OF SUPRA-PUBIC LITHOTOMY

No.	Reference.	Surgeon.	Age of Patient.	Date of Operation.	Bladder Wound.	Drain.	Skin Wound.	Catheter.
1	<i>Lancet</i> , July 3, '86	Mr. PARKER	3	June 4	Catgut	No.	Recti and Skin sutured	No
2	do.	do.	—	—	Not closed	—	—	Yes, soft
3	do. Sept. 26	Sir W MACCORMACK	7½	July 23	Catgut	Yes, upper part of wound	Recti and Skin sutured	No
4	<i>B.M.J.</i> , Oct. 2, '86	WALTER PYE	48	May 20	No	Yes, perineal	No	No
5	do.	Sir W. MACCORMACK	3½	—	Yes	Yes	Yes	No
6	<i>Lancet</i> , Aug. 7, '86	Mr. T. SMITH	43	April 22	4 inches upper part sutured	Yes	Above	Yes
7	do.	Mr. MORRISON	—	—	—	—	—	—
8	<i>Lancet</i> , Oct. 23, '86	Mr. BERNARD PITTS	3	Sept. 8	Sutured throughout	Skin wound	Closed above	No
9	<i>Lancet</i> , Oct. 30, '86	Mr. LICHTENBERG	15	Nov. 5, '85	Left open	Yes	Closed above	No
10	<i>Lancet</i> , Jan. 8, '87	Mr. MACGILL	40	—	Left open	Yes	—	—
11	—	do.	aged	—	Left open	—	—	—
12	—	do.	—	—	Sutured	—	—	—
13	<i>Lancet</i> , Jan. 15, '87	Dr. HUME	30	Sep. 9.	No	Yes, deep	Above	Yes
14	do.	do.	aged	Nov. 2	No	Yes	Above	No?
15	<i>Lancet</i> , Feb. 5, '87	Mr. C. J. BOND	49	?	Sutured catgut	Superficial	Sutured	Three hours
16	do.	Mr. JOHN CROFT	72	July 17	Left open	Yes	Sutured above	For 2 days, removed as useless
17	<i>B.M.J.</i> , Feb., 12, '87	Sir W. MACCORMACK	7	—	Yes	—	Sutured	No
18	<i>B.M.J.</i> , Mch. 5, '87	Mr. BIRD	5	Oct. 15	—	Yes	Sutured, except below	Yes
19	<i>Lancet</i> , April 30, '87	Mr. WALKER	3	Aug. 2	Catgut	No	Sutured	No
20	<i>Lancet</i> , April 30, '87	do.	8	Nov. 9	Not sutured	—	Two Sutures, upper part	No
21	do.	do.	4	Nov. 21	Catgut	—	Left partly open	—
22	do. May 7, '87	Mr. MORGAN	6½	—	Catgut, muscular coat	Superficial	Sutured	Yes, removed on second day
23	do. May 21, '87	Mr. ENSON	60	Jan. 11	No.	Yes, 24 hrs	Above	No
24	<i>B.M.J.</i> , May 21, '87	Mr. MORGAN, of Oxford.	16	—	—	Yes, for few hours	—	—
25	<i>B.M.J.</i> , June 4, '87	Mr. PAGE	14	Feb. 7	Not sutured	Yes	Sutured	No
26	<i>Lancet</i> , June 11, '87	Mr. GREENWOOD	4½	Oct. 18	Catgut	Yes	Sutured, except below	Not hard

## FROM JULY 1, 1886, TO JUNE 30, 1888.

Size of Stone.	Progress of Case.	Date of Closure of Wound.	Remarks.
Small	4th day apparently healed	Cicatrised in 2 weeks	14 days before quite healed
—	T. 102°; urine escaped through wound; symptoms relieved on withdrawing catheter	—	Months before cicatrisation complete
Small	No particular rise of T.	August 4, healed	No bad symptoms—12 days
4 oz.	Urine through upper wound by blocking of perineal wound on 7th day. Sloughs from p. wound first five days	August 1	Lateral and supra-pubic. Upper wound healed in 37 days; case complicated with urethral strictures; calc encysted at neck
?	Rapid recovery	—	Well in 7 days
3 xxiv gs.	Temp. once 102°; up in 22 days	Sinus closed after 16th July, after 2nd opera. for closure	Had no symptoms until 2 or 3 weeks before with that sized stone
3 ii	All went well until 13th day	—	DIED on 14th day from uræmia; no <i>post-mortem</i>
Small marble	Rapid recovery	—	Well in 7 days, discharged in 10 days
3vii.	Cellulitis, rigor once T. 103°, fistula	January	Protracted recovery, 2 months
3iii.	Urine passed by urethra on 20th day	—	Recovered
3ii.			
gs x.			
3sa.	Wound healed on 10th day	—	10 days
gs x.	Wound broke down	—	Recovered
1½ in.	Catheter removed 4th day as useless, urine naturally 14th day	October 21	42 days
3vi.	No urine naturally till 37th day	Dec. 9	40 days
1½ x 1½	T. normal on 1st day, urine through wound by straining at catheter	—	Healed in 4 days
(1) 945grs.	Very slow for 14 days, patient very feeble, convulsive attack on 4th day. Wound kept open till Sept., when allowed to heal	September ?	45 days before allowed to heal, and discharged in September
(2) 961grs.			
Small mulberry		Seven days	Recovered in 7 days
Small	Second day T. 103-104° 2' (extravasation), abdominal pain, wound opened, urine escaped twelve days	Nov. 10	Nearly a month. Mr. B. will not do it again—26 days
89 grains	5th day, sudden rise of T., extravasation into scrotum, T. 101°, incisions, urine escaped from wound	August 24, healed	Over 3 weeks 22—days
50 grs	In twenty-four hours rigor tympanitis, pain in abdomen, urine escaped 2 weeks	Decem. 18	About 1 month say—35 days
20 grains	Urine all passed per urethram	—	Rapid recovery—20 days
Moderate	Bladder distended second day, with blood on fourth day, wound opened sixth; extravasation slight. Mr. M. considers the urethritis the cause of distension	—	4 weeks and 7 days—35 days
3v.	Drainage tube twice slipped and was not replaced. After the 27th healing was rapid, as the urine came through urethra.	—	Say 40 days
—	Urine passed through wound	—	Wound granulated
85 grs.	Wound opened, cellulitis left iliac region, extravasation	March 26	Nearly 7 weeks—47 days
186 grs.	Seventh day died suddenly	Not closed.	No cause discovered of DEATH

## RECORD OF SUPRA-PUBIC LITHOTOMY

No.	Reference.	Surgeon.	Age of Patient.	Date of Operation.	Bladder Wound.	Drain.	Skin Wound.	Catheter.
27	<i>Lancet</i> , June 18, '87	Mr. WHITEHEAD	51	Feb. 9	No	No	No	No
28	<i>Lancet</i> , June 18, '87	do.	42	April 10	No	No	No	No
29	do.	do.	53	May 23	No	No	No	No.
30	<i>B.M.J.</i> , June 18, '87	Mr. J. FARRANT FRY	19	August 31	Catgut Suture	Yes	2 Silver Sutures Above	Yes
31	<i>B.M.J.</i> , July 16, '87	Mr. O. GALFEY	63	Feb. 20, '87	No	Yes, deep	—	—
32	<i>B.M.J.</i> , July 2, '86	Mr. SYKES	9½	Nov. 25	No	No	Suture, upper part	—
33	<i>Lancet</i> , July 16, '87	Mr. C. H. WILLIAMS	18	June 25	Catgut, several	Yes, till 4th day	6 Carbolised Silk Sutures	—
34	<i>Lancet</i> , Aug. 27, '87	Mr. HARDIE	42	April 2	No	Yes, perineal	No.	Perineal tube
35	<i>B.M.J.</i> , Sept. 17, '87	Mr. W. J. SMITH	—	June 6	No	Yes, wide	1 Suture near upper angle	Not till July 8
36	<i>Lancet</i> , Oct. 22, '87	Mr. J. H. MORGAN	1½ 16 mo	June 11	No	Yes	3 Catgut	—
37	<i>Lancet</i> , Oct. 22, '87	Mr. N. DOBSON	51	September 3	—	Yes, rem'd next day	—	Yes, rem'd 5th day
38	<i>B.M.J.</i> , Dec. 24, '87	Mr. P. S. FREYER	16	June 5	—	Yes	Sutured in part	Yes
39	<i>Lancet</i> , Dec. 31, '87	Dr. R. CRAN	35 Hi'do	April 24	No	—	Sutured	Yes
40	do. Jan. 14, '88	Dr. WILSON	46	Oct. 27	—	Yes, for 24 hours	Partially by Silver Suture	—
41	<i>B.M.J.</i> , Feb. 11, '88	Mr. C. J. BOND	10	—	Sutured	Yes	Sutured	No
42	<i>Lancet</i> , Mar. 10, '88	Dr. K. McLEOD	35	—	No	Yes	No	Yes
43	do.	do.	25	—	No	Yes	No	Perineal Tube
44	do.	do.	20	—	No	Yes	No	Yes
45	<i>B.M.J.</i> , Mar. 10, '88	Mr. L. W. MARSHALL	—	—	—	—	—	—
46	<i>Lancet</i> , Mar. 17, '88	Dr. HUME	18	May 27	No	Yes	1 Suture	No
47	<i>B.M.J.</i> , July 30, '87	G. G. GILLON	43	April 2	No	Yes	5 Catgut 5 Wire Sutured	No
48	<i>B.M.G.</i> , Mar. 31, '88	do.	53	July 30	No	Yes	—	No
49	<i>A.M.G.</i> , also July 15, '87	H. V. DREW	51	—	No	Yes	Sutured round drain	Yes

Twice published



## FROM JULY 1, 1886, TO JUNE 30, 1888.

Size of Stone.	Progress of Case.	Date of Closure of Wound.	Remarks.
3iii ss.	T 102° 4' at time of operation, double pneumonia, death on ninth day; difficulty with bladder by not being held up	—	DEATH
?	Lateral operation on December 12, 1884; Retrnd. Mch. 31, 1885. Apl. 2nd, attempt to reach bladder not completed, bladder being undistended, owing to no instrument being passed in, owing to false passage. April 10, bladder reached	May 16	36 days
—	Lateral attempted, failed owing to depth of perineum; urine through supra-pubic wound. Perineal tube not used. Phosphatic deposit on wound	—	August 31, DEATH
—	No urine passed through wound; no trouble	Sept. 16	Discharged 16th day
428 gra.	Woman; 7 calculi in all removed, hard	51 days	51 days
120 gra.	Urine through wound 1 month, took appearance of strumous ulcer; not finally healed till January, 1887	Jan. 31, '87	To heal completely, 67 days
509 gra.	2nd day redness and tension round wound; Sutures removed, and 3i pus escaped; 4th day, tube removed; 5th day, urine per urethram	July 31	Left hospital in excellent health, wound soundly healed. 36 days
3ii. gra. 30	Lateral and supra-pubic; on 5th day urine passed above; cystitis	June 24	85 days
3ii. gra. 50	Wound healed slowly; urine discharged freely above pubis till July 8	About July 16	Discharged cured August 27. Urine contained small amount pus till a few days before his discharge. 40 days
2371 gra.	Next day T. normal; some urine passed per urethram, also on following day; on 3rd day nearly all passed per urethram	—	Discharged in fortnight without interruption to perfect recovery. 14 days
—		Nearly quite 27 Sept.	Discharged a few days later. Say 30 days .
3vi. 35 gra.	Slight sloughing around incision	August 7	44 days
3v.	Urine passed almost entirely by wound for three weeks	May 28	Healed in 30 days
1½, 1½, x ½ in.	2nd day 1 oz., 3rd day 2 oz. urine per urethram, 3rd day all escaped by wound; excoriations; 10th day Rigors, 20th day escape ceased, wound healthy, contracting rapidly	Nov. 20	24th day perfectly well, except cedema of left lower extremity, due to obstruction of venous circulation; it quickly subsided
3v.	Rapid recovery	—	Up and about in 13 days
3xv.	Protracted recovery, but no bad symptoms	—	52 days. No unhealthy action or constitutional disturbance
3vi., gr. 2	Median for prostatic calculus and supra-pubic as well; no bad symptoms	—	No unhealthy action or constitutional disturbance. 63 days
3vi.	Catheter removed in two days, drainage tube in 19 days	—	No unhealthy action or constitutional disturbance. 48 days
—	Died on 4th day from Cellulitis	—	Annandale's method. DEATH
3 gra.	Very narrow pubic interval, 1½ inch; urinary fever, or early peritonitis	July 3	38 days
3ii. 1	Washed out; tube removed 9th day	May 17	45 days
2½ x 1½ ineh	Pouched bladder, extravasation, incisions, rigor, cystitis	Oct. 4	Prone position. 66 days
2 calculi, each size of walnuts	Ether had bad effect, chloroform would not relax muscles; spasms violent; did not rally properly, and died in 24 hours	—	He was worn out with disease, and had been cut for stone the previous year DEATH

## RECORD OF SUPRA-PUBIC LITHOTOMY

No.	Reference.	Surgeon.	Age of Patient.	Date of Operation.	Bladder Wound.	Drain.	Skin Wound.	Catheter.
50	A.M.G.,	Dr. J. LOCKHART GIBSON.	3	March 2	3 Catgut, not enough	—	Yes	No
51	do. Oct. 15, '87	STEPHEN FLOOD	24	June 25	Catgut	—	—	—
52	do.	do.	40	August 6	Catgut Glover's stitch.	Yes	Sutured	—
53	Unpublish'd	Dr. MACCORMICK.	1½ 14ms.	Mar. 2, '87	No	Yes, 1 in abdominal down to bladder	—	None
54	do.	do.	7	Jan. 5, '87	Yes Catgut	Yes, do.	—	No
55	do.	do.	2	Feb. 9, '87	—	Yes	—	No
56	do.	Mr. G. E. TWYNAM	12	Aug. 31, '87	Sutured	Superficial, Yes	2 Sutures	Yes
57	A.M.G., May, '88	Mr. HUMPHRAY	65	Jan. 4, '88	Sutured	Superficial	Yes	Yes
58	Unpublish'd	Mr. G. HANKINS	50	Jan. 19	No	Deep	Yes	No
59	do.	do.	24	Jan. 8	Yes	Superficial	Yes	Yes
60	A.M.G., April, '88	Dr. FLOOD	26	Dec. 19, '87	No	No	No.	No
61	B.M.J., May 26, '88	F. PAGE	25	Feb. 7, '88	No	Yes, superficial	Sutured	Yes, 4 days
62	B.M.J., May 26, '88	do.	6	Feb. 28, '88	No	Superficial	Yes	7 days
63	do.	do.	23	Feb. 29, '88	No	do.	Yes	6 days
64	do. June 2, '88	KENDALL FRANKS	65	May 10, '87	Sutured doubly	Superficial at upper part.	Yes	5 days
65	do.	ALCOCK NIXON	81	—	Sutured	Yes	Yes	Yes
66	Unpublish'd	Dr. MACCORMICK	2½	—	Not sutured	Yes	—	No
67	Lancet. June 2, '88	Mr. BELLAMY	73	Mar. 15, '88	No	Yes, deep	Stitched	Yes

## FROM JULY 1, 1886, TO JUNE 30, 1888.

Size of Stone.	Progress of Case.	Date of Closure of Wound.	Remarks.
16½ gra.	Urine passed through wound ; wound torn open 6th day	March 22	Hamilton splint. 20 days
850 gra.	Extravasation 3rd day, vomit 2nd and 3rd day ; most of urine passed through wound	—	
43½ gra.	Drain removed 3rd day, 5th day 3 stitches removed, and 7th day the 3 last stitches	—	On 25th day small sinus appeared, through which urine passed ; on 29th August case still incomplete. 23 days for completion
Split pea	Uninterrupted recovery ; urine passed per urethram 4th day	March 12	About 10 days
1½ x 1½ inch	Uninterrupted recovery ; abdominal wound healed by first intention	January 17	Had lateral operation done in first instance ; stone too large for extraction through perineum ; bladder drained through lateral incision. 12 days
About 1½ x 1 inch	Wound suppurated ; had a little rise of T. on 4th day ; all urine passed per urethram 11th day	February 30	Week and delicate child ; phosphatic stone ; broke in forceps ; lot of debris washed out of bladder. 21 days
111 gra.	No bad symptoms ; catheter removed 7th day, allowed up on 14th day	Sept. 14	Absolutely healed by 20th September. 20 days
Over ¾v.	Vomited ; wound slightly opened ; urine escaped in small quantities for 16 days	January 31	27 days
3iv.	4 years ago lithotripsy tube removed 3rd day, 6th day catheter left in small abscess in scrotum ; February 25 no urine through wound, after which it broke down, and urine discharged again. He returned to hospital with urinary fistula ; 6 weeks to heal	April 19	90 days
3iv.	All well till 10th day ; catheter slipped out, and distension of bladder followed, with escape of a few drops through wound, now healed	—	20 days
Over ¾ii.	Lateral operation ; first stone crushed, fragments could not be removed, suprapubic to remove them ; upper wound healed February 17 ; small fistula below, peritoneum wounded, and sewn up.	—	60 days
Thrush's Egg	Bladder wound healed in 7 days ; very little escape in first few days	16th day	Uninterrupted recovery. 16 days
Cob-nut	Catheter blocked ; no urine through wound until 4th day, very little escaped after ; bladder healed on 8th day	10th day	Uninterrupted recovery. 16 days
L'rge Sp'nish Chestnut	Catheter removed 6th day, slight escape till 9th day	13th day	Uninterrupted recovery. 13 days
3 stones, in all 666 gra.	Catheter retained 5 days, drainage tube 7 days	14th day	Uninterrupted recovery. 14 days
¾ii., gra. 30, 159 gra.	On 5th day died of syncope, from which he suffered previously ; P M ; bladder wound healed, except for half inch, from which on 7th day a little urine escaped when catheter was blocked	Death	DEATH
Walnut ¾ii.	Out on the gripe two years previously ; pouched bladder ; wound of peritoneum sewn up	18 days —	Recovered. 18 days Recovered

## CASE OF PENETRATING WOUND OF RECTUM AND BLADDER.—DEATH.

By T. CARSON FISHER, M.D., M. CH., RESIDENT MEDICAL OFFICER, SYDNEY HOSPITAL.

G. W. æt. 23, a carpenter, was admitted into hospital on the morning of July 23, 1888. He stated that while working on a balcony that morning he fell, and when near the ground one of the handles of a barrow penetrated his rectum to the depth of about 6 inches. The handle was wooden, smooth and round, about one inch in diameter.

On admission he was suffering severely from shock. He did not complain of severe pain, but rather of a dull aching in lower abdomen. A laceration was found in the posterior part of anus, about  $1\frac{1}{2}$  inch, dividing the sphincter.

The rectum was full of clots, and a tear was felt in its anterior wall, transverse in direction, about one inch long, and situated about  $1\frac{3}{4}$  inch from anal orifice. A catheter passed into the bladder was felt through this tear in the rectum, showing that the base of the bladder was ruptured, and a passage existed from that viscus into the rectum.

No wound was felt in the bowel higher up. A little blood came away through the catheter, no urine, as the bladder seemed empty.

In the evening about half a pint of blood and urine had come away through the rectum.

His condition was still very low.

July 24. A consultation of the surgical staff was held, but the man's condition precluded the hope of any operative interference.

The abdomen was distended, tympanitic, slightly tender. Pulse 140, Temperature 98.4. He lingered on until 6 p.m., when he died, apparently from shock.

Autopsy 20 hours after death.

Abdomen. The small intestines were lightly coated with recent lymph. In lower part of abdominal wall, in front, dark blood was extravasated beneath the sub-peritoneal tissue. About one pint of turbid bloody fluid was found in the pelvic cavity.

In the fundus of the collapsed bladder, about one inch behind its summit, a transverse tear about one inch long was seen on its peritoneal aspect; this led into the bladder. The rectum and bladder were removed. Blood was found extravasated beneath the peritoneum in the recto-vesical space.

A circular lacerated opening, one inch in diameter, was found in the anterior wall of the rectum about  $1\frac{1}{2}$  above sphincter; this led into the bladder, just behind the urethral orifice in the

trigone. The upper opening in the fundus was also clearly seen when the bladder was opened. The wooden pole had passed through the anus, tearing the posterior part of the sphincter; then penetrated the anterior wall of the rectum into the base of the bladder; and finally perforated its summit into the abdominal cavity.

This case from its rarity is, I think worthy of record.

## NOTES ON SOME FORMS OF AURAL REFLEX NEUROSIS.

By A. J. BRADY, HON. SURGEON EAR, NOSE AND THROAT DEPARTMENT, SYDNEY HOSPITAL.

THE external auditory canal has for its nervous supply branches of the trigeminus and pneumogastric nerves.

And it is known that irritation of these nerve filaments, by hardened cerumen, foreign bodies, &c., may give rise to very decided symptoms in parts remote from the ear, but supplied by other branches of the same nerve. Anyone who has often to syringe and perform manipulations in the ear cannot help remarking how frequently he produces a sharp fit of coughing or a tendency to vomiting in his patient, while so doing. The most sensitive area is on the posterior wall of the canal, about half-way between the tympanum and the external meatus; and in most people a fit of coughing can be brought on by irritating this spot with a probe. Cases of cough arising from an aural reflex are more common than some people think, and if the true cause were not recognized in a case of this kind, the physician might exhaust the pharmacopœia in vain; and as the cough arising from this cause is generally a very distressing one, it is important that the cause should be recognized when present, the more so, as the relief, when the cause is removed, is generally prompt. Although there usually is immediate relief of the symptoms, the latter often do not altogether cease for some time after the cause has been removed. The nerves have acquired a vicious habit, and they do not cease at once to send messages along the familiar circuit. The stomach, as well as the lungs, may suffer from reflex irritation arising in this way.

Reflex aural cough is spasmodic in character. The patient coughs several times in quick succession, as if a crumb of bread had got into the larynx; and the irritation which impels him to cough seems to him to arise in this region.

The following cases will illustrate this disease:

In May, 1886, Miss Y., from a northern township, came under my care for chronic otorrhœa of

fifteen years' duration. She had been treated by syringing and lotion, without success. I found a perforation of the drum membrane, with suppuration of the cavity of the tympanum. The discharge quickly ceased under treatment, and in a few weeks the perforation healed. About a year afterwards this lady consulted me. She had come to town for advice, fearing that she was consumptive, on account of a distressing cough from which she suffered. She consulted Dr. MacLaurin, who recognized the cause of her trouble, and she came again to me on account of her ear.

I found a piece of hardened wax on the posterior wall of the external auditory canal. The ear had remained soundly healed. I removed the wax, and applied cocaine mur. in solution to the sensitive area. With this patient the reflex was so marked that the lightest touch with a probe set up a violent fit of coughing. This condition had probably been brought about by the long-continued otorrhœa, causing a chronic hyperæmia, and consequently exalted nerve sensibility in the meatus. I only saw the patient a few times, she was then relieved, and returned to the country, and I have not since heard of her.

Case II.—In February, 1887, Mrs. G. consulted me. She stated that she was unable to take any food. She was suffering from a very frequent, dry, distressing cough. Her general health was much impaired by want of appetite and sleep—the latter caused by the incessant cough. Having failed to detect any cause for the symptoms in the chest, and having been directed thereto by the character of the cough, I examined her ears. She was not aware that anything was wrong with them, and she heard conversation without difficulty. I found hard wax impacted in both ears, particularly on posterior wall and roof of canal. Syringing the right ear brought on convulsive cough and sickness, so that I had several times to desist. A plug of very hard wax was removed after some difficulty, and the surface where it had rested was superficially ulcerated. On removing the wax in the left ear, cicatrices of the drum membrane showed that there had formerly been suppuration of the middle ear. She then recollected that this ear had discharged in childhood. The right ear was evidently the seat of the reflex. Four days after removal of wax the cough was nearly well, but some loss of appetite remained. I used pellets of gelatine and extract of opium in the ears as a sedative. I saw her only once more, when she was nearly quite well, and I have heard that she has since remained well.

3 Lyon's-terrace, Hyde Park, Sydney.

## SPLENIC LEUCOCYTHÆMIA.

READ BEFORE THE N. S. W. BRANCH B.M.A.

By ALFRED SHEWEN, M.D. LOND., SENIOR PHYSICIAN, PRINCE ALFRED HOSPITAL, SYDNEY.

THE case which I have to bring under your notice this evening is that of a man, J.F., aged 55 years, a native of Scotland, who was admitted to Prince Alfred Hospital on the 24th of April last, suffering from an enlarged spleen and leucocythæmia. His history was as follows: He left Scotland 40 years ago for America, where he resided for a long time, spending several years in the Lower Mississippi, and suffering from ague very severely whilst in these districts. From America he came to these colonies, spending some of his time in New South Wales and some in Queensland. With the exception of an attack of rheumatic fever, which he got about eight years ago, he enjoyed good health during his residence in Australia, up to within a few months of his admission to the hospital. He had not had syphilis, but had always been a pretty free liver, going on the spree now and again. On admission, the hospital notes state: "Patient is very anæmic and emaciated, and at times his face expresses considerable suffering. His abdomen is greatly distended, the left side more than the right. By palpitation, a hard mass can be felt on the left side of the abdomen, its right border extending  $1\frac{1}{2}$  inches to the right of the umbilicus, below it reaches almost to Poupart's ligament, and above it disappears under the left costal cartilages. On percussion, the whole mass is dull from Poupart's ligament to the sixth right rib in the nipple line. About mid-way between the umbilicus and the sternum there is a well-marked deep notch in the mass. He has a soft systolic murmur at the apex, which is inaudible anywhere else. His blood, when placed under the microscope, shows a great increase of white corpuscles, sometimes more white than red corpuscles can be seen; some large white corpuscles can be seen here and there. The urine is pale, faintly acid, sp. gr. 1020, no albumen, copious deposits of urates. Patient complains of great pain in abdomen, and says that it has been more or less constant for some time, so much so as to render his life a burden to him; he is never free of it for 24 hours at a time, and it is always worse at night. His appetite is very poor, and he is extremely prostrate. He has never lost any blood by the bowel or otherwise."

Of course, the diagnosis presented no difficulty, there being no doubt that the man was suffering from an enlarged spleen with leucocythæmia. After a con-

sultation with the hospital staff, it was determined that any operation was out of the question, in consequence of the evidence of leucocythæmia, in addition to the enlargement of the spleen. Although I had hoped from his history that we had to do with an enlarged spleen pure and simple, and that consequently an operation for its removal might have been possible; but the presence of such an excess of white corpuscles put the idea of any operation on one side.

His history, up to the day of his death, on the 22nd of July, was one of more or less pain in the abdomen, for the relief of which various kinds of sedatives were had recourse to. Whilst with us he developed a startling tendency to hæmorrhage, and ultimately died from hæmorrhage in the bladder, after the passage of a catheter. We had great difficulty in stopping the hæmorrhage after the extraction of a tooth, and at another time he developed a huge blood tumour about the buttocks. But as I have stated, after various ups and downs, he ultimately died three months after his admission from hæmorrhage into the bladder. The spleen is here on the table for you to see, and I will hand round two photographs of the patient taken by a student, the dark shading representing the splenic dullness.

A *post-mortem* examination was made by Dr. M'Allister, and I will now read what he says:—

*Externally.*—Body anæmic, poorly nourished; very slight emaciation; mucous membranes pale; no anasarca or œdema. Slight abdominal distension. No enlargement of superficial lymphatic glands; no enlargement of superficial veins.

*Internally.*—On cutting through the sternoclavicular joints and breaking through the manubrium sterni, the cancellous tissue of the bone was seen to be of a dark yellow colour and very soft, so that it broke down under the gentlest pressure, and at places it was transformed into a thick, greyish yellow oily fluid, resembling pus. A similar condition of the cancellous tissue was found in the case of several ribs and the clavicles; mentioned by some authors as commonly found after death from leucocythæmia. On opening the thorax, the lungs were very pale in colour, but otherwise healthy. There was no enlargements of the anterior or posterior mediastinal lymphatic glands. The heart was relaxed at all parts. The right auricle was empty; the right ventricle contained a very small amount of pale, greyish-yellow, poorly-coagulated blood clot, resembling flakes of pus.† The left auricle was

flaccid, and contained about a drachm of fluid blood. The left ventricle contained a small quantity of pale, pus-like clot, similar to that found in the right ventricle. The substance of the heart was pale, soft, flabby and friable. On opening abdomen there was no collection of ascitic fluid. The upper part and left side of the abdomen was seen to be occupied by the enlarged liver and spleen. The spleen extended from the level of the sixth rib in the left mamillary line to the left crista ilii, and from the left side of the spinal column behind to two inches to the right of the mesial line in front. It was placed in an oblique direction, from above and behind, downwards and forwards. It was enlarged symmetrically, its general contour unaltered, being an exact representation of the shape of a normal spleen, even to the notch, but on a very much enlarged scale. There was no heterologous tumour formation. The splenic artery was enlarged to twice its normal calibre, the veins being dilated and their walls thinned. The splenic omentum was generally enlarged. There were no abnormal adhesions between the surface of the spleen and its surroundings; its surface was smooth; capsule slightly thickened and opaque at parts; consistence normally firm, colour normal. There was a small cyst in its anterior border, just beneath the capsule, containing a small quantity of sanious serous fluid. This cyst was separated from the splenic pulp by a thin, partly organised capsule or adventitia.

This cyst was situated at the site of a puncture by an exploratory needle made some short time previous to death.

The spleen weighed 7lbs. 9½ozs. The lower border of the liver reached to three inches below the lower margin of the thorax on the right side, and nearly to the umbilicus in the middle line, so that above the umbilicus for a couple of inches the borders of the liver and spleen were in contact. The liver, like the spleen, was enlarged symmetrically, of normal appearance and consistence, rather pale in colour. Its vessels were not markedly enlarged, the glands in the portal fissure were not enlarged. The weight of the liver was 8lbs. 12½ozs.

The kidneys were enlarged and pale, the right weighing 5½ozs., the left 6ozs. The capsule peeled off fairly easily, leaving here and there traces of a pseudo-capsule. The substance of the kidneys was pale and flabby, the cortex narrowed, the pelvis and calyces dilated with atrophy of the secreting structure. The right ureter was dilated to about twice its normal size, and its walls thickened.

The left kidney was in a rather more advanced condition of "surgical kidney" than the right,

† NIEMEYER says:—"On autopsy of persons who have died of leucœmia we often find in the heart, particularly the right one, and in the large blood vessels, yellow, or yellowish-green, soft, sneary, coagula-like pus.

and the left ureter was dilated to more than four times its normal calibre. The spleen at its lower and posterior part had pressed upon the left ureter. The muscular coat of the urinary bladder was hypertrophied, its cavity was greatly enlarged and distended by a mass of blood-clot feebly coagulated. On slitting up the urethra there was found a stricture about the junction of the membranous and spongy portions. On the floor of the urethra, at the site of the stricture, was a recent abrasion of the mucous membrane, which had evidently been the source of the hæmorrhage.

The abdominal and mesenteric veins were not enlarged.

There was no enlargement of the retro-peritoneal lymphatic glands.

Brain and spinal cord not examined.

In the mouth there was a recent blood-clot in the cavity from which the second right molar tooth had been extracted three weeks previously.

"Under the microscope on the table, you will find sections of the spleen, liver, kidney, heart, and lymphatic glands, which have been carefully prepared by Dr. McAllister. The spleen, you will see, exhibits none of the characters of the ordinary ague-cake, but corresponds exactly to the usual microscopical appearance of a leucocythæmic spleen. The sections of the liver show very well how the liver cells are being encroached upon by the leucocythæmic cells, and how they are being crushed up and absorbed. You may find rows of hepatic cells becoming flattened, squeezed up by the enormous development of the leucocythæmic cells. Even the tissue of the heart has not escaped, for between the individual muscular cells of the heart you will see a development of leucocythæmic cells."

We had without doubt in this case an example of splenic leucocythæmia; what connection the attacks of ague in South America had with his disease, I am unable to say. Niemeyer says: "No connection has been proved between this affection and malarial fever or scrofula;" but I am very much inclined to think that the man must have suffered from an ague-cake in the first instance, and that he subsequently became leucocythæmic. Be that as it may, it is an interesting case owing to the history of malaria in the case. I am not aware of any record of a case of ague-cake having afterwards become leucocythæmic. But I see no reason why such should not occur. There seems to be a good deal of confusion in the text books on medicine with regard to leucocythæmia and lymphadenoma or Hodgkin's disease. This has arisen, no doubt, in consequence of there being two forms of leucocythæmia, one being represented by the case I have

brought before you this evening, and which is characterized by enormous enlargement of the spleen without any very marked enlargement of the lymphatic glands; this form of leucocythæmia is well called the splenic. The second form is the lymphatic, in which the brunt of the enlargement is in the lymphatic glands. These two forms are no doubt representatives of the same disease, but differ in the anatomical distribution of the growth. Lymphadenoma differs from leucocythæmia in the condition of the blood, and in the microscopical characters of the tissues diseased. In leucocythæmia there is an enormous increase of white corpuscles or leucocytes, whereas in lymphadenoma we get hardly any alteration of the blood as regards red and white corpuscles. As regards the microscopical characters, I will quote what Woodhead says: "For a long time, lymphadenoma or Hodgkin's disease was classed as a form of leucocythæmia, and even now the pathological changes are in many text books stated to be the same. This is an error which must be carefully avoided, as the changes are essentially different in the two conditions. In leucocythæmia the changes occur principally in the splenic pulp, whilst in lymphadenoma the change occurs primarily in the areoid sheaths of the vessels, and spreads thence until a considerable part of the pulp may be involved."

## RECORD OF A CASE OF INTESTINAL OBSTRUCTION.

READ BEFORE THE S. A. BRANCH B.M.A.

By THOMAS CAWLEY, M.D., BRUX.; F.R.C.S.  
Ed., M.R.C.S.E.

I wish to report particulars of a peculiar case of obstruction of the bowels.

Mr. E. W., aged 54, was taken to the private hospital on Tuesday, 31st July. I, being the family attendant, was sent for, and saw him with Dr. Borthwick, who informed me that late on Sunday night he sent aperient medicine, viz.,  $\frac{1}{2}$  gr. of elaterium, with 3i. pulv. jalap co., and a Seidlitz powder four hours after, and visited patient early on Monday morning, when he administered hot water enemata. Repeated the injection next day without effect.

The history, as we gained it from the patient, was that after going to bed on Sunday night he was seized with pain in the abdomen, which he attributed to constipation, and sent to Dr. Borthwick for something to relieve it. After taking the elaterium he was sick, and the abdomen became greatly distended. There had been no action of the bowels. At the time of consul-

tation (six o'clock on Tuesday) abdomen was much swollen and tympanitic, pulse irregular, temperature normal, and tongue clean. Patient chiefly complained of fulness and nausea, was not in any pain; but complained of an uneasy sensation in the neighbourhood of the cæcum. Thus far the symptoms pointed to sudden obstruction from fecal accumulation about the ileo-cæcal region; but careful percussion discovered no sign of a fecal tumour in any part. Dr. Borthwick thought we might try the effect of croton oil, but it seemed to me preferable to try other treatment, viz., 1 gr. of extract bell. every four hours, application of belladonna and linseed poultices over abdomen, and injection of warm olive oil—broth diet, whisky and barley water.

Wednesday, August 1st.—Consultation with Dr. Corbin when the symptoms were unchanged. No evacuation had taken place, but the last oil enema had passed, and some flatus with it, so we agreed to continue the treatment. Rather bad night, but no further symptoms.

Thursday, August 2.—Consultation with Dr. Verco. Treatment to be continued, but suggested hot water instead of oil injection. No relief.

Friday, August 3.—Trouble increased, pulse much weaker, with slight vomiting.

Saturday, August 4.—Decidedly worse.

Dr. Way saw him, suggested an operation, but without giving much hope.

This operation I had spoken of to Mrs. W. upon first seeing patient, but knowing the state of his health, told her I did not think it likely to be productive of good results.

Sunday, August 5.—Patient died at 2 p.m.

Dr. Poulton kindly made a *P.M.* on Sunday afternoon. We found large and small intestines much distended with gas, and with very little fluid contents, nearly complete stricture in descending colon, caused by the malignant tumour before you. There was no peritonitis nor any discoverable enlargement of the mesenteric glands. The peculiarities of this case were that no pain or inconvenience occurred before this attack, bowels acting daily, appetite extra good. Patient suffered from rheumatics, gout, heart disease, and diabetes.

The chief points of interest in this case are

- (1) That so complete an obstruction by organic disease could exist without any particular pain.
- (2) That what pain there was was referred to the cæcum—some distance from the actual lesion.
- (3) No symptoms of organic stricture existed before the attack of pain on the Sunday preceding death.

There was no history of constipation, hæmorrhage, or tenesmus at any time to draw attention to the presence of the morbid growth.

## CASE OF SLOUGHING OF SCROTUM CONSEQUENT ON APPARENT RUPTURE OF THE BLADDER— RECOVERY.

By W. A. LIGHTBOURNE, M.B., OF HAWERA,  
NEW ZEALAND.

R. W., aged 29, a strong man, muscular, well developed, and accustomed to the sea, states that while working in the bush felling trees, he was suddenly seized with a violent pain in his right groin and testicle. In a very short time (he thinks about an hour), the pain became so severe that he had to return to his tent. He said that by the time he had walked a distance of about three-quarters of a mile, that being the distance between the tree he was felling and his tent, he felt so sick that he was compelled to lie down. He remained in that position, with his clothes on, till his mates came home. They stripped him and made him comfortable, thinking that he must have strained himself and that he would soon be all right. He suffered great pain, both in the groin and testicle, all that night, but felt slightly easier in the morning, so his mates left him and went to their work. On their return they found him much worse, but did not view the case seriously; so for three whole days and part of a fourth the man lay without receiving any skilled attention, but on the fourth day his sufferings became so intense that they thought it was high time that he should be removed home from the bush, where he could be well nursed and properly attended too. He got up and attempted to stand, but could not, so his mates rigged up a stretcher and carried him on it to the nearest railway station, a distance of some 4 or 5 miles. The road he was carried on was a very bad one, being only a bush track, and he described the pain he experienced from the jolting as something horrible. When he got to the train he was laid on the floor of the guard's van, and was carried on it without suffering very much some 20 miles. When he arrived at the station nearest his home he was placed in a cab, and had to sit or partially sit during the remaining part of his journey, a distance of about a mile. Owing to the half-sitting position in the cab, the severity of the pain was so intense that his mates who accompanied him home feared he would die in the cab.

January 10, 1888, about 9 p.m., I received a message to go and see him as quickly as possible, the messenger telling me that he had just been brought home from the bush, suffering from a rupture, that his people were very nervous, but that he knew he would be all right as he had seen lots of cases like it before.

I arrived there and found Mr. W. made as comfortable as kind hands could make him,



stripped and in bed; I saw immediately that I had to deal with a very serious case. He was moaning incessantly. His look was one of the greatest agony and anxiety, while his face was suffused with a cold perspiration; in fact, to judge by his face alone, death seemed imminent. On examining his pulse, I found a very small pulse, so rapid that I could barely count it. After two or three attempts to count it, I made it out to be 140 per minute, the thermometer (a quick one), indicated 96.5°. On removing the bed clothes and examining the supposed rupture, I found an elongated swelling down the right groin, and extending down the right scrotum; the scrotum was so much swollen and increased in size, that it extended half-way to his knee; the swelling in the groin was of a very dark brown colour, and quite doughy to the touch, as was also that of the scrotum; the swelling in the scrotum gave the impression of its being a severe case of orchitis, but on its lower and upper aspect there was a dark livid spot, about an inch in diameter, having all the appearance of a slough forming there. I managed to raise the scrotum with very great difficulty, and found that the tumefaction was equal, both on its anterior and posterior aspect. The patient was so exhausted that I was unable to make a thorough examination, still I satisfied myself that hernia was not the pressing evil. There was no vomiting, and his bowels were regular. I ordered the free administration of brandy and water, with hot linseed poultices to the inflamed parts, also hot bricks to his feet, giving him as a medicine spt. ether nit. ℥xx., spt. ammon. co. ℥xx., and tinct. opii. ℥xx., in ʒi. water, a draught to be taken immediately. I then left him, promising to see him again about 1 a.m.

1 a.m.—Found that he was much more comfortable, but complained severely about the weight of the poultices. Pulse, 120; thermometer, 98°; and the expression of suffering not so prominent. On examining the tumour, I found the colour and size much the same, but the dark spot seemed to me to be decidedly darker, and while handling the penis, I found some drops of urine coming away, and the sheet had a circle of wet on it corresponding with where the penis had rested. Made strict enquiries re urine. He told me that he had passed it freely up to the time of his leaving the tent (about 11 hours ago). Examined the bladder over the pubes and found that it was not distended, and as it seemed to be coming away freely in drops, at the patient's urgent request I did not use the catheter, but gave strict orders that his nurse was to pay particular attention to the quantity that escaped, ordering her to place a sponge in an oiled silk bag on the end of the penis, and if he passed any naturally she was to take a note of

the quantity. I discontinued the poultices and ordered hot fomentations with tinct. opii ʒi. to ease fomentation. The spot where I feared the slough, to be pencilled over with collodion in order to prevent any absorption of the opium, should there be any separation of tissue before my next visit.

January 11, 9 a.m.—Suffering much less pain. Pulse, 110; thermometer, 99.15°. Expressed himself as much better, but said he felt sick and very thirsty. Ordered the brandy to be reduced and given with soda water, and as grapes could be had, to suck some. On removing the sponge and squeezing it, about  $\frac{3}{4}$  of a coffee cup full of urine was pressed out of it. On examining the tumour, found that the left side of the scrotum was becoming involved, and that the right side looked very much as it did at 1 a.m., with the exception of the black spot, which showed now its true character, and that it was in reality a slough, for a distinct line of demarkation was forming, and that the slough would be much larger than I expected, the diameter length  $1\frac{1}{2}$  inches and  $1\frac{1}{2}$  in width. Ordered beef tea and wine, the wine to be alternated with the brandy. Gave a prescription: spt. ammon. co. ʒvi., tinct. cinchon. co. ʒi., syrup ʒi., aqua to ʒviii.; one tablespoonful every three hours. The fomentations with the opium to be continued; pencilling as before; the use of the sponge to be continued and tried every two hours, the patient still strongly objecting to the use of the catheter.

9 p.m.—Suffering much less; a very offensive odour in the room, familiar to all who have attended cases of sloughing. Pulse, 108; thermometer, 99°. Tumour much the same. Slough separating nicely, the centre of it being completely clear and emitting the odour referred to, the left side continues to enlarge. On the right side and anterior to the perineum complains of great pain. On examination I found the inflammatory action extending right down to the anal orifice, forming a hard band about  $\frac{3}{4}$  of an inch in thickness, resembling to the feel like a doughy cord. His sickness and thirst much relieved; has not urinated naturally, but fully two coffee cups full was squeezed out of the sponge. I was now convinced that there was partial paralysis of the bladder, and added tinct. nux vom. to the mixture, 10℥ doses every three hours, and substituted linseed poultices with the addition of carbolic acid. The acid was prepared 1 in 30 in oil, and applied directly over sloughing part, the poultice over it. The poultices were necessarily very light, and had to be attended to frequently. Fresh dressings to be applied every hour and a half.

12th, 10 a.m.—Improving. Pulse, 104; thermometer, 100°. Has passed a very good night, having slept, as he describes it, about 4 hours on

and off. Pain with the exception of the perineal space not nearly so severe; tumour about the same size. Slough separating beautifully, and is discharging a fluid somewhat of the character of urine and from its abundance I feel sure that it must be. The sponge had been emptied three times during the night, and yielded nearly three coffee cups full. Continued the same treatment, reducing the brandy and increasing the wine.

9 p.m.—Improving. Pulse, 100; temperature, 99.20°. Has voided about two ounces urine naturally. Sponge held about two cups full. Tumour much smaller in the groin. Slough separating and is now more than half detached. Escape of fluid from sloughing part is so great that all the bed-clothes had to be removed. The odour in the room, although the windows had been open all day, was very offensive. Continued treatment, sprinkling disinfectants all over the room and bed-clothing.

18th, 9 a.m.—Much the same in all respects. Bowels not moved. Ordered a small dose of ol. Ricini in brandy. Another slough is now showing itself immediately below Poupart's ligament; so far it does not look as if there would be an extensive slough at this spot. There is also a black spot, similar to a slough, forming in the perineum; the left side of scrotum enlarging, while the right is getting much smaller, evidently caused by the very abundant discharge of the fluid resembling urine, which was so copious during the night that the whole of the bedding had to be removed, and a waterproof cloth placed under him to protect the bed. The sponge held about 2½ cupsful. He voided urine naturally on two occasions, from 2 to 3 ounces each time. The orifice of the penis is getting very sore, the urine causing excoriations; ordered collodion to be applied to it to try and protect it. Treatment continued.

9 p.m.—Doing well. Pulse, 96°; temperature, 99.15°. First slough separating and three parts detached. Dark spots under Poupart's ligament, and in perineum beginning to slough, the one in the perineum being much the larger of the two. Urinated once, passing about 6 ounces. Sponge held about one cupful. Bowels moved. Escape of fluid by slough very great. Thirst is now not distressing. Continues to enjoy his beef tea and wine. Wants a change, so ordered a fresh laid egg, beat up and given in new milk and port wine. Treatment continued.

14th, 9 a.m.—In all respects as on the previous evening. Slough still adherent; discharging freely, but the bed clothes are not so saturated as formerly. Separation at the edges of both the perineal and groin sloughs commencing; smell so offensive that I was obliged to find a fresh nurse.

Treatment continued. Enjoys his egg, milk, and wine. Sponge held 2 cupsful. Urinated once freely, about 12 ounces.

9 p.m.—Progressing favourably. Slough nearly separated. The other sloughs separating. Urinated twice, passing about 6 ounces on each occasion. Squeezed about one cupful out of sponge. The tumour in the groin, together with the right side of scrotum, much smaller, while below, and in front of left scrotum, there is going to be another slough. Treatment continued.

15th, 9 a.m.—Doing well. Pulse and temperature as before. Passed urine about 12 p.m., and again about 6 a.m., about 20 ounces in all. Sponge held about one cupful. The slough came away when the dressings were removed and exposed the testicle, which appeared as a white ball resembling an egg. It looked healthy, except at its base which was a dark red, and had a spot of black in it about the size of a large pea. This rather alarmed me, as I feared that the testicle might slough and so complicate matters. The other sloughs are separating nicely. Changed the mixture to tinct. ferri mur. ʒiii., tinct. nux vom. ʒii., tinct. cinchon. co. ʒi., syrup ʒss., water to ʒviii.; one tablespoonful every three hours.

9 p.m.—Same as morning. Slough in groin and perineum separating. Dark spot in front of left scrotum beginning to slough; black spot in testicle also sloughing. All the sloughing wounds look very healthy. General health improving. Same treatment continued.

16th, 10 a.m.—Patient improving in health. Passed urine twice during the night, about 30 ounces in all. Sponge held about half a cupful. Slough in groin superficial and came away. The large surface exposing testicle granulating freely. Black spot on testicle beginning to separate. Slough on left scrotum will soon come away, as it is also very superficial, while the one in the perineum is much deeper and will take more time. The scrotum and groin of right side very much reduced in size. Discharge of fluid is still great. Offensive smell still present, but not nearly so bad as formerly. Treatment continued.

9 p.m.—Improving. Sloughs all separating. Sponge held about 4 ounces. Made water freely about 6 p.m. The slough on the testicle seems to be deep for its size. The other sloughs coming away beautifully. Treatment continued.

17th, 10 a.m.—General health improving. Wanted a chop which I refused. The sloughs in groin and left scrotum very healthy and granulating freely. Slough in testicle separating, but cannot determine its depth. Sloughs in right scrotum and perineum coming away, and expect their removal by evening. Made urine freely twice during the night, in all about 35 ounces.

Sponge held only half an ounce. The collodion applied to the penis seems to have acted like a charm, as the excoriations are healing, and I hope they will give me no more trouble. Treatment continued.

9 p.m.—Improving. All the sloughs are now removed with the exception of the one on the testicle. The slough in the perineum is very deep and exposes a surface  $1\frac{1}{2}$  inches in length by  $\frac{3}{4}$  deep. Treatment continued.

18th, 10 a.m.—Improving in all respects. Very anxious for some solid food. Allowed a soft boiled egg with a slice of toast, which he enjoyed. Beef tea and wine, or egg, milk and wine to form the principle ingredients of support. All the sloughed surfaces are granulating freely with the exception of the one on the testicle, which has not separated. Urinates more freely. Sponge held little or no urine. Discharge from sloughing surfaces reduced very much in quantity, although still sufficient to cause a change of bedding. Treatment continued.

9 p.m.—Improving. Discontinued sponge, patient now urinating freely. All surfaces granulating except slough on testicle, which is still attached, but looks as if it would come away by morning. Treatment continued.

19th, 10 a.m.—Improving. Patient says I am starving him. Allowed him a chop for lunch, and an egg for tea. All the sloughs are now separated. The hole in the testicle is about the size of a large pea, and looked deep enough to cover three parts of it. Treatment continued.

9 p.m.—Doing wonderfully well. All the sloughing surfaces are granulating freely. Treatment continued.

20th, 10 a.m.—Patient may be said to be out of danger. The sloughs are granulating freely and look remarkably healthy. Discharge has now nearly ceased, the dressings being sufficient to keep the bed clean. Urinates freely. Treatment continued.

9 p.m.—Improving in all respects. Treatment continued.

21st, 10 a.m.—Patient so far recovered that I had to invent some way of drawing the edges of the sloughed surfaces together. This I did by increasing the size of a pad of carbolized cotton that the whole scrotal bag had been resting on, so as to bring the mass as nearly as possible on a level with the front of the thighs. Having done that, I ran a strap of isinglass plaster round the tumour, fastening one end in front, bringing the edges together, then running the plaster over the edges, under the tumour, and so on to the thigh of the opposite side. By reversing each strap you will see how the edges were kept in apposition, and thus allowed me to continue the dressings of carbolized oil and poultices. I need not say that I left sufficient drainage for each sore.

22nd, 10 a.m.—Patient continues to improve in every way, and now gives me no uneasiness as to his ultimate recovery. From the 21st the same treatment was continued until the patient's recovery was established, which, for such a severe case was, in my opinion, very short, being only rather better than eight weeks from the date at which he was seized till he was able to walk, with slight assistance, from his bedroom to the drawing-room.

Now, what created all these injuries is a question difficult of solution. I was not at all satisfied with the history of the case as imparted to me by the patient himself, so inquired from others how he had been living, what doing, and how he had been behaving himself. I learned that on New Year's Eve, he went, as they say here, on the spree. One man told me that he drank no less than 15 or 20 long beers in something like two or three hours time. He then left to go home; fell into a ditch, where he was found some hours afterwards, in a comatose condition from the drink. Is it a likely theory that, having imbibed so much beer, his bladder became filled to extension, and that the shock received in falling may have ruptured the bladder; or, suppose some other unfortunate, going home in a somewhat similar condition, may have fallen or trodden upon him, would that not be sufficient injury to affect the parts to the extent of creating the sloughing? If owing to either of the suggested causes, then comes the puzzle: Why did he not complain before the 6th, five days from the fall? The patient can assign no cause.

## PROCEEDINGS OF SOCIETIES.

### NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 74th General Meeting of the Branch was held in the Royal Society's Rooms, Sydney, on Friday, 6th September, 1888, at 8.15 o'clock. Present—Dr. Chambers (President), in the chair; Drs. Quaife, Fiaschi, Shewen, Sydney Jones, Twynnam, W. Chisholm, Faithfull, Crago, Garrett, Knaggs, Hankins, Roth, Worrall, Fisher, Marano, Scot-Skirving, Lyden, Breneman, West, Brady, Thring, McCulloch.

Visitor—Dr. Hurst.

The minutes of the previous meeting were read and confirmed.

The following gentlemen were elected members:—Dr. H. H. Marshall, Liverpool-street; Dr. R. T. Reading, 189, Elizabeth-street.

THE PRESIDENT (Dr. Chambers) exhibited a specimen of uterine appendages.

THE PRESIDENT announced that since the last meeting of the Branch, Dr. George Marshall had died.

DR. QUAIFFE proposed, and Mr. HANKINS seconded, "That a letter of condolence be forwarded to Mrs. Marshall."

DR. SYDNEY JONES read a paper on "Two cases of Hydatid Tumour simulating distension of the bladder."

DR. SHEWEN said he would like to ask Dr. Jones how he ascertained that the hydatid cyst was in front of the bladder, and also as to where the puncture was made.

DR. QUARF said that in the first case mentioned by Dr. Jones the tumour was distinctly in front of the bladder. The puncture was made about the middle line. There were no bad symptoms in this case, and the man was about again in a few days.

MR. G. T. HANKINS said he remembered a case in the Prince Alfred Hospital of a woman suffering from an enlargement resembling in appearance an ovarian tumour, but when punctured showed clearly hydatid fluid, and about 6 pints were drawn off. After two weeks the operation was again repeated. The patient was discharged, but was re-admitted shortly afterwards, and it was decided to make an incision, and a painful of fluid was taken away.

DR. SYDNEY JONES, in reply, said "that in answer to Dr. Shewen, it was an easy matter to ascertain that the cyst was in front of the bladder by examination per rectum. The puncture was made in the middle line about  $1\frac{1}{2}$  inch above the pubis."

DR. GEORGE E. TWYNAM read a paper on "The present position of the Supra-pubic operation."

DR. FIASCHI said the thanks of the meeting were due to Mr. Twynam for his paper, at the same time he did not think members should be sparing in their criticisms. It appeared to him (Dr. Fiaschi) that Mr. Twynam had made an *ex parte* statement as to the revival of an old method, and had not brought forth convincing proof as to its superiority. There was a possible danger in the Supra-pubic operation, which had not been mentioned by Mr. Twynam, namely, rupture of the rectum. There was a good deal of difficulty in discussing this question and controverting the figures, as one had to trust entirely to memory and might unconsciously err.

MR. G. T. HANKINS said, with regard to suturing the bladder, this can be readily done in the case of females. He (Mr. Hankins) had removed a stone weighing four ounces, in which case he sutured at once, and made provision for a proper drainage—a slight leakage occurred about the 8th or 9th day; but after, the patient made a good recovery. Another case was that of a man who had been operated on previously. In this case no suture was put in, and no catheter used. It was found that the wound became very sloughy and tardy in healing.

MR. G. E. TWYNAM, in reply, thanked the members for their criticism, and said it was no doubt difficult to compare figures. The remark made by Dr. Fiaschi as to the possible danger of rupturing the rectum was correct, and by some chance had been overlooked in preparing the paper, although Dr. Twynam remembered having made a note of it. The question of distending the bladder needed every care, as over dilatation should always be avoided. As to the paper being an *ex parte* statement, he (Mr. Twynam) had started with the idea of making certain comparisons, and had been very much astonished at the results, so much so that he might possibly have been led to think a great deal of the supra-pubic operation.

DR. A. SHEWEN read some notes on a case of ague-spleen—and exhibited a specimen.

THE CHAIRMAN announced that £133 19s. had been collected for the widow of the late Dr. Jockel.

## SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY Meeting held at the Adelaide Hospital on the evening of Thursday, September 27, 1888.

Present:—The President (Dr. Stirling) in the chair; Drs. Davies Thomas, Symons, Cawley, Verco, Gardner, Stewart, Aitken, Gault, Cleland, Cookson, Marten, Ewbank, Hamilton, Clindening, Mackintosh, Toll, Corbin, and the Hon. Sec. (Dr. Poulton).

The minutes of the previous meeting were read and confirmed.

Dr. Niesche was elected a member of the B.M. Association and its South Australian Branch.

THE PRESIDENT announced that it was the intention of the Council to take the necessary steps at the next annual meeting to alter the Bye-laws of the Branch with reference to the election of members, as the present Bye-laws, though confirmed by the Council of the Association, were not in consonance with the Bye-laws of the Association.

MR. BICKLE forwarded a card specimen showing the eye conditions seen in an additional case of the occurrence of phlyctenular ophthalmia accompanying erythema nodosum.

DR. GARDNER opened a discussion on Dr. Davies Thomas's paper on "Cholecystotomy," illustrating his remarks by reference to a case on which he had recently operated.

DR. A. A. HAMILTON spoke and gave particulars of a case of biliary colic in which cholecystotomy was proposed, but subsequently found unnecessary as there was spontaneous evacuation of numerous calculi, with relief of symptoms. He showed the calculi. DR. THOMAS replied.

DR. HAYWARD moved that this Branch of the British Medical Association, representing a large majority of the medical profession of South Australia, regrets the action of the Civil Service Commission in recommending that the services of Dr. Whittell as President of the Central Board of Health shall be dispensed with, and trust that the Government will not carry out the suggestion, feeling that the colony can ill afford the loss of an officer whose special experience and scientific attainments are essential qualifications for the important position he holds.

DR. CORBIN seconded the resolution, supporting it strongly.

DR. CLELAND, whilst sympathising with the motion in the main, deprecated the idea of approaching the Government in the matter.

DR. THOMAS supported the motion, feeling quite sure that the duties of the Colonial surgeon were onerous enough to prevent his giving the time and thought so necessary to properly lead the Board of Health.

The motion was carried unanimously, and the Secretary was directed to forward it to the Chief Secretary and to the Press.

DR. CAWLEY read the "Record of a case of intestinal obstruction," (vide page 15), showing also a specimen removed from the subject *post-mortem*, descending colon almost completely occluded by a circular ulcerating malignant growth.

DR. THOMAS spoke in favor of abdominal exploration in such cases.

DR. HAYWARD thought Dr. Cawley's case instructive as drawing marked attention to the comparative merits of purgative and palliative treatment in such cases.

DR. STIRLING had once examined the dejecta after the exhibition of elaterium, and found that the

epithelium of the intestine had been very copiously disintegrated and shed. He looked upon it as a dreadfully violent drug.

DR. VESCO remarked on the sudden incidence of symptoms in this case of advanced malignant disease.

DR. COOKSON's paper on a "Foreign body in the larynx" was held over till next meeting, and the sitting closed.

#### ARNOLD AND CO.'S EXHIBITS AT THE CENTENNIAL INTERNATIONAL EXHIBITION, MELBOURNE.

AMONGST the exhibits of interest to the medical profession at the Melbourne Exhibition are Max Arnold's well-known antiseptic dressings. Coming through the portal of the German Court and passing the piano room we go through the little side door up to the elevated platform, where we are attracted by the huge exhibit of the powder works. Behind and a little to the right we find Max Arnold's exhibit, a large square table divided into several compartments. On the one side we see the absorbent cotton wool in its different state of manufacture, beginning with raw material, then cotton wool already absorbed but not carded yet, and then in its finished state. On both sides are the different impregnated wools to be seen and made up in packages. Opposite are the gauzes assorted in the different percentages as they are in use for surgical purposes. Further on we come to Priesnitz's water bandages and specialities for oculists and aurists. The next compartment shows us boxes and packages for emergency purposes put together in a most ingenious and practical manner. On shelves in the middle of the table are the cotton wools, to be seen in glasses, as well as catguts carbolized, and sublimated silk threads. On

the top shelf we find the different antiseptics in the order in which they came in use. The whole exhibit is a most complete one and as handsome to look at as it is interesting and informing. The trade mark, which is to be found on every parcel, is prettily exhibited, enlarged on large layers of white wool, also photographs of the factory.

Along the wall, on an elevation, is placed a pyramid of iron casks containing Paul Liebe's extract of malt, a preparation prepared in vacuum according to Baron J. Liebig's prescription. One of the most important preparations is Paul Liebe's Soluble Food for infants, an adjunct to cow's milk to make it digestible for infants. The circulars for this preparation show testimonials from leading medical men of Europe and Australia. Other preparations are Leguminose, a flour which does not want any cooking and is valued as strengthening food for invalids and convalescents. Paul Liebe's Extract of Malt with cod liver oil, with quinine and iron, or with lime, are also highly recommended, as the manufacturer has succeeded in making these preparations palatable without their being deprived in any way of their beneficial effects.

We are pleased to note that our editorial in the June number of the *A. M. Gazette*, entitled "Want of provision in New South Wales for the care of the wounded in case of war," has not been without effect, for the Government have now given authority for the formation of a Medical Staff Corps in connection with the N. S. Wales Volunteer Force, to consist of 69 members of all ranks.

#### THE INTERCOLONIAL MEDICAL CONGRESS, ADELAIDE, 1887.

We have been requested to publish the following statement of the Hon. Treasurer in account with the Intercolonial Medical Congress, Adelaide, 1887:—

DR.	£	s.	d.	CR.	£	s.	d.
To Grant from S. A. Branch British Medical Association ... ..	10	0	0	By Printing ... ..	33	2	10
„ 147 Members' subscriptions at 21s. ... ..	154	7	0	„ Stamps ... ..	16	17	0
„ Special subscription (Dr. Morgan) ... ..	5	5	0	„ Advertisements ... ..	8	0	0
„ Interest on fixed deposit ... ..	2	5	0	„ Exchange ... ..	1	2	9
„ Dr. Thomas (half cost of printing paper) ... ..	5	2	0	„ Telephone ... ..	2	0	0
„ Proceeds of sale of extra copies of transactions ... ..	16	11	4	„ Reception Committee ... ..	4	11	9
				„ Hire of chairs ... ..	3	15	0
				„ Reporter ... ..	6	1	0
				„ Clerk ... ..	2	0	0
				„ Printing proceedings ... ..	116	0	0
	£193	10	4		£193	10	4

(Signed), W. T. HAYWARD,  
Hon. Treasurer.

I certify that I have examined the vouchers and accounts herein, and that the above statement is correct.

(Signed), T. W. CORBIN.

October 2, 1888.

P.S.—There remain 46 copies of the transactions, which have been handed over to the S. A. Branch of the British Medical Association.

## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castle-streagh Street, Sydney.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, OCTOBER 15, 1888.

## EDITORIAL.

### THE PROPOSED FOUNDLING HOSPITAL IN VICTORIA.

A MEETING, at which Dr. T. Embling presided, was held at the Town Hall, Melbourne, on August 16, for the purpose of considering the propriety of establishing a foundling hospital in Victoria. Mr. Staples took a leading part in the discussion, and from the report of a subsequent meeting held on the 21st August, we learn that he has promised £1,000 as his subscription towards its foundation, and will contribute a further sum of £200 per annum for five years for its maintenance. If it is admitted that it is the duty of a country to preserve the infant life of its community, it is indisputable that one of the most efficient aids to this end will be the establishment of such an institution. The large number of cases of infanticide, of which Dr. Youl, who as coroner should be in the best position to know, says that the perpetrators in 60 to 70 in each year remain undetected, practically shows to what desperate straits many poor women are driven to avoid the terrible consequences of a probably temporary folly, the result very often of an excess of natural affection. Were there some place to which poor girls, who have yielded, perhaps unthinkingly, to the promptings of nature, could take the resulting children, and where they would be received without unnecessary and tedious formality, the majority of these cases of murder, committed in the thoughtlessness of despair, would be avoided. No one who studies the subject can for a moment really think that the establishment of such an institution would in any way increase immorality, for young men and women, when about to commit the act which so often results in such terrible consequences to the woman, do not pay much attention to the existence or non-existence of foundling hospitals.

## LETTER TO THE EDITOR.

### CASE OF PELVIC ABSCESS, DISCHARGED PER ANUM.

(To the Editor of the A. M. Gazette.)

DEAR SIR,—The following case of pelvic abscess, discharged per anum, recovery and subsequent labor, came under my care recently and may be of some interest.

Mrs. M., æt. 22, delicate complexion and fair hair, was confined of her first child early in August of last year. She had rather a tedious labor, but was delivered naturally. On the sixth day the ordinary symptoms of perimetritis set in, namely, pulse increased in frequency, great pain in lower abdomen, some vomiting and painful defæcation. On examining vagina I found it hot and swollen; however, after a few days' treatment the symptoms subsided, but she remained weak, with slight acceleration of pulse. She went home a distance of some miles, greatly against my wish, on the 11th day. Four days afterwards she had a return of pain, and when I saw her, her temperature was 105, pulse rapid, tongue coated, great abdominal pain and tenderness. Internally I found a good deal of fulness and tenderness high up and to the right side of the vagina, whilst the cervix uteri was pushed to the left.

Had patient confined to bed and large poultices applied over abdomen; injected morphia sulph. with atropin sulph. subcutaneously; ordered large doses of quinine to lessen temperature, and had warm vaginal douches, with a little Condy's fluid, used three times a day. Towards end of September she began to complain of tenesmus, which led to an examination of the stools, when purulent matter was seen with the fæces.

At this time she was in a state of great debility and attenuation, although supported by tonics and generous diet. About the commencement of October she felt better, and the tumour was much reduced in size and was only just perceptible.

Improvement went on slowly until middle of October, when an aggravation of the symptoms again took place in consequence of her making some unusual exertion; however, in a few days she recovered from this, and again progressed satisfactorily. By the end of November she was so well as to be allowed to go on a visit to some friends, when shortly after menstruation made its appearance, all pain and purulent matter had ceased, her appetite had returned, and she put on flesh. Some induration, however, remained on right side, but only perceptible from the vagina.

In ten months from this time she returned to town to be confined at full time, she looked so well

and was so improved in appearance, and had become so stout that I did not at first recognise her. Her labor was good, and her convalescence most favorable. She, however, complained of a stiffness, with a little pain, on forceable extension of leg.

The disease in her instance ran a course of four months, and from the first appearance of purulent matter till recovery was established, occupied fully one half of this space. Her restoration to health was complete, and is it not remarkable how soon after this conception took place?

Faithfully yours,

E. ST. GEORGE QUEELY,

Government Medical Officer and  
Surgeon to the Palmer Hospital.

Maytown, Northern Queensland, Sept. 3.

DR. W. PEIRCE, Medical Superintendent of the Coast Hospital, at Little Bay, near Sydney, has requested us to publish the following

#### MEMORANDA.

Patients suffering from enteric fever are separately classified from those suffering from febricula at Coast Hospital.

During first 5 months of 1888, 14 male and 12 female (26) patients were admitted suffering from febricula, and were classified as such, although four of them arrived at Coast Hospital with medical certificates of enteric fever.

During the same time :

- 2 patients suffering from pneumonia,
- 1 " " endometritis,
- 2 " " measles

(all of which five patients recovered), were sent to the Coast Hospital with certificates of enteric fever, but were correctly classified on arrival.

During first five months of 1888,

62 patients were ill on admission 14 days and over ;

23 patients were ill on admission 21 days and over.

The average of duration of illness on admission was 12 days.

W. PEIRCE, M.D.,

Medical Superintendent.

Coast Hospital, September 26, 1888.

WE have been requested by Messrs. Fletcher, Fletcher, and Stevenson, in London, whose advertisement will be found in the *A.M.G. Advertiser*, to state that Mr. W. J. Watkins, of Sydney, no longer represents their firm in Australia.

#### OBITUARY.

##### STEPHEN FLOOD.

WE regret to have to announce the death of DR. STEPHEN FLOOD, A.B., M.B. 1862, M.D. 1879, T.O. Dubl ; L. et L. Mid. 1862, F. 1868, R.C.S. Irel., of Toowoomba, which occurred on September 9, at Southport (Qu.), where he had gone to recruit his health. The deceased gentleman, was born in Dublin on January 31, 1840, and was educated at Trinity College, Dublin. After obtaining his degrees he practised for some years in India, where he discharged his professional duties with distinction, and at the same time he took a great interest in athletic sports. He unfortunately contracted malaria during his stay in India, and afterwards suffered severely from acute rheumatism, and was invalided home in 1871. After honorably filling several hospital and other appointments he sailed for New Zealand, but finding the climate too damp, he left for Australia, and in 1877 settled at Toowoomba (Qu.), where he has practised ever since. In 1880 he was appointed Surgeon Superintendent of the Toowoomba Hospital, and being stricken with a severe illness in 1886, he took Dr. Sheaf into partnership, and with his assistance held the post till the day of his death, the immediate cause of which being disease of the cerebral arteries and extravasation of blood on the brain ; his body was brought from Southport to Toowoomba for burial, which took place on September 12, and was largely attended. The deceased gentleman was a Justice of the Peace ; he was possessed of an unusual skill in surgical diagnosis and treatment, and was much respected by his professional brethren and by the public.

##### JOHN MARTIN BROWNE.

WE regret to have to record the death of Mr. John Martin Browne, L.R.C.P. et R.C.S. Edin. 1870, of Minmi (N.S.W.), who, on Friday night, September 21st, was thrown from his horse, and his head coming into contact with the road, he was rendered unconscious. Dr. Blackwell, of West Maitland, was summoned, and ordered the removal of the unfortunate gentleman to the hospital, when it was ascertained that he had sustained concussion of the brain. He lingered only a few hours, and expired on Saturday morning, September 22. The deceased gentleman arrived in the colony only twelve months ago.

##### LEWIS WALTER DAVIES.

MR. L. W. DAVIES, M.R.C.S. Eng. 1877, L. et L. Mid. R.C.P. Ed. 1878, late of Esk, Queensland, and formerly Senior House Surgeon at the Liverpool Royal Infirmary (Eng.), died at Wickham terrace, Brisbane, on September 20, at the early age of 34. He arrived in the colony three years ago.

##### SAMUEL BROWN.

MR. S. BROWN, M.B. et Ch. M. Edin. 1875, who practised at Wickham terrace, Brisbane, for the last three years, died on September 22, aged 34.

ABOUT the end of October Mr. BRUCK, medical bookseller in Sydney, will receive a full supply of the 2nd edition of "Fagge's Medicine" (1888), 2 vols., published at 38s, postage 2s 6d ; also of "Martindale and Westcott's Extra Pharmacopœia," 5th edition (1888), published at 7s 6d, postage 3d.

## THE MONTH.

## NEW SOUTH WALES.

THE foundation-stone of a hospital to be erected at a cost of £1300 has been laid at Moree, in a farming and pastoral district, 391 miles N.W. of Sydney.

MR. SLEE, the superintendent of diamond drills, reports that while boring at Ballimore, in the Dubbo district, at the depth of 550ft., an artesian well of mineral water was tapped, which flowed through tubing 8ft. above the surface, at the rate of 1,000 gallons an hour. Mr. Slee considers it a great pity that such valuable mineral water should not be utilised. Ballimore, he thinks, should be an Australian Carlsbad or Gastein, and the water should be used for the cure of rheumatism, dyspepsia, and similar diseases. The water, he avers, is as good if not better than any of the German mineral waters sold in Australia, and by bringing its undoubted curative qualities before the public a great benefit would accrue not only to the Dubbo district but to the whole of New South Wales.

A YOUNG man, æt. 27, a native of New South Wales, has been found suffering from leprosy in a very severe form; he is now confined at the Coast Hospital at Little Bay, near Sydney.

A BANQUET was tendered at Maclean, on Tuesday, Oct. 2, to Dr. J. B. Crabbe, on the eve of his departure from the district.

DR. JOHN HARRIS, of Newcastle, has been presented with a portrait in oil of himself by the Mayor of Newcastle, on behalf of the Newcastle Ambulance Corps, in recognition of his past services as lecturer to the class.

DR. T. B. BELGRAVE has removed from Burwood to Broken Hill.

DR. G. DE V. BELSON has succeeded to the practice of J. G. Bouchier, at Tumbarumba, 400 miles S. of Sydney.

DR. WALTER BLAXLAND has commenced practice at Broken Hill.

DR. C. A. EDWARDS has commenced practice at Manly, the most popular watering-place of the colony.

DR. J. A. HAYDEN has commenced practice at Warren, on the Macquarie River, 353 miles W. of Sydney.

DR. W. M. HELSHAM has succeeded to the practice of Dr. L. G. Davidson, at Richmond.

DR. M. HERDEGEN, who lately removed to Deloraine, Tasmania, has resumed practice at Albury.

DR. R. D. McMASTER, for the last few years Resident Medical Officer of the Bathurst Hospital, has commenced practice at Goulburn, in conjunction with Dr. Morton.

DR. C. E. ROWLING, has removed from Kempsey to Fernmount, on the Bellinger River, 371 miles N. of Sydney.

DR. W. M. SEMPLE, late of Ivanhoe, has succeeded to the practice of Dr. J. S. Wilson at Wilcannia; Dr. Wilson intends to return to Scotland.

DR. J. S. WILSON, of Kiama, has been appointed a coroner for the colony generally.

DR. JOHN WARD, late of Birmingham (England), has settled at Newcastle.

## NEW ZEALAND.

DR. DUNCAN MACGREGOR, of Wellington, inspector of hospitals and charitable institutions in the colony, is on his way to Australia to report on the working of the hospitals in the colonies.

DR. T. G. H. HALL has removed from Helensville to Whangarei, 90 miles N. of Auckland.

DR. P. J. POWER, late of Rathkeale, co. Limerick (Ireland), has commenced practice at Dunedin.

## QUEENSLAND.

WE have been requested to state that Dr. J. Bancroft, of Brisbane, has not resigned his appointment as representative of Queensland on the Intercolonial Rabbit Commission, as stated in last month's issue of the *A.M.G.*

AT a meeting held in the Brisbane Town Hall on October 8, a resolution was passed affirming the desirability of establishing an asylum for inebriates. Sir Thomas M'Ilwraith also informed a deputation, on October 8, that he fully approved of a bill to promote the establishment of a home for inebriates, and that he would endeavor to have such a measure prepared during the coming recess.

DR. J. P. LONG has removed from Townsville to Cooktown.

DR. W. C. C. MACDONALD, of Ingham, has been elected President of the Herbert River Jockey Club.

DR. E. J. R. MOHS has removed from Roma to Toowoomba.

DR. PATRICK SMITH, Resident Medical Superintendent of Dunwich Benevolent Asylum, has been appointed Assistant Health Officer for the Port of Brisbane.

DR. J. T. WILLIAMS has removed from Townsville to Ayr, on the Lower Burdekin, in a sugar-growing district 800 miles N.W. of Brisbane.

## SOUTH AUSTRALIA.

THE first examination in connection with the Gawler sub-centre of St. John's Ambulance Association, took place at the Gawler Town Hall on September 24, with very satisfactory results. Dr. Poulton, of Adelaide, officiated as Examiner, and eighteen candidates presented themselves for examination, all of whom were members of Dr. Dawes' ladies' class. The candidates were put through the usual tests, and each of them was successful in passing the required standard.

DR. C. A. ALTMANN, of Tanunda, has gone to England on a visit, for twelve months. Prior to his departure a social was tendered to Dr. Altmann by the principal residents of the district, testifying to his ability, and to the respect and esteem in which he is held. During his absence, Dr. J. A. Swindells will carry on Dr. Altmann's practice.

DR. F. W. ELLISON, of Glenelg, has been appointed a Justice of the Peace.

## VICTORIA.

The Council of the University of Melbourne have adopted the following resolution of the Faculty of Medicine:—"That in view of the urgent need for practical instruction in such special branches as diseases of women, diseases of children, diseases of the eye, ear, and throat, the council be requested to ascertain from the authorities of the Melbourne and Alfred Hospitals whether such instruction can be obtained in these institutions."



THE total deaths in the colony during 1887 numbered 9,213 males and 6,792 females, or equal to 15,69 per 1,000 of the population. Typhoid fever was the cause of 631 deaths during the period, and of 300 from January 1, 1888, to June 1 last.

A YOUNG girl, aged 12 years, residing at Prahran, was, on September 18, put under chloroform to have some teeth extracted. The chloroform was administered by Dr. Cooke, and the teeth were drawn, but about five minutes after the removal of the last tooth, and after she had made a very feeble attempt at clearing the blood from her mouth, she became faint, and suddenly expired. All efforts to restore animation were futile.

DR. O. L. M. ABRAMOWSKI, formerly of Terowie (S.A.), has settled at Mildura, the centre of Chaffey's Irrigation Colony in the Wimmera district.

DR. BALLS-HEADLEY, of Melbourne, has been elected a Fellow of the Royal College of Physicians, of London.

DR. C. H. DEGNER, late of Wycheproof and Sandford, has settled at Myrtleford, in an agricultural and mining district, 177 miles N.E. of Melbourne.

DR. H. A. DERAVIN, late Assistant Medical Officer at the Sandhurst Hospital, has settled at Kerang, 195 miles N.W. of Melbourne.

DR. JOHN FLYNN, late of Keady (Ireland), has settled at Bairnsdale, 185 miles E. of Melbourne.

DR. E. J. GURDON, late of Learmonth, has commenced practice at York-villa, Brighton, near Melbourne.

DR. H. F. MAIN has resumed his practice at Malmesbury.

DR. J. F. W. MANSON, late of Malmesbury, has succeeded to the practice of Dr. J. A. Sutherland, at Dunolly.

DR. H. M. O'HARA, late of Brighton, has returned from his trip to Europe, and resumed practice in Melbourne, at 154 Collins-street east.

DR. H. R. H. PEARE, late Surgeon on board the s.s. Duke of Devonshire, has settled at Macarthur, 244 miles W. of Melbourne.

DR. GEO. SERJEANT, late of Launceston (Cornwall), has commenced practice at Ballarat.

DR. A. R. STACPOOLE, late of Numurkah, has commenced practice in partnership with Dr. C. E. Gray, of Ferrars-place, Albert Park, South Melbourne.

DR. J. A. SUTHERLAND has removed from Dunolly to Ascot Vale, a suburb of Melbourne.

DR. G. W. TURNLEY has removed from Hobart (Tasmania) to Prahran, a suburb of Melbourne.

DR. G. F. WICKENS has removed from Romsey to Learmonth, in an agricultural district, 114 miles N.W. of Melbourne.

#### MEDICAL APPOINTMENTS.

Abramowski, Otto Louis Moritz, M.D. Berl., to be a Public Vaccinator at Mildura, Vic.  
Blanchard, George E., L.R.C.P. of R.C.S. Ed.; L.F.P.S. Glas., to be Government Medical Officer at Thornborough, Qu.  
Eddie, Arthur William, M.B. of Ch. M. Aberd., to be Officer of Health for shire of Winchelsea, Vic.  
Edgewell, Samuel Henry, M.R.O.S. Eng., to be Acting Government Medical Officer at Roma, Qu.  
Gormley, John William, L.R.C.S.I., L.K.Q.C.P. Irel., to be Officer of Health for the district of Weldborough, Tas.

Harding, Thomas Massey, F.R.C.S. Eng., to be Government Medical Officer at Thargomindah, Qu.

Hood, Alexander Jarvie, to be Government Medical Officer and Vaccinator for the District of Lower Clarence River, N.S.W., vice Dr. J. B. Crabbe, resigned.

Houlson, James, M.B. of Ch. M. Edin., M.D. Syd., to be Visiting Surgeon to the gaol at Grafton, N.S.W., vice Dr. A. A. Cohen, resigned.

King, Frederic Truby, M.B. of Ch. M. Ed., to be an additional Public Vaccinator, for the district of Wellington, N.Z.

McCall, John, M.B. of Ch. M. Glas., to be Officer of Health for Ulverstone, Tas.

MacLennan, John Norman Emslie, M.B. of Ch. M. Aberd., to be Resident Medical Officer at the Prince Alfred Hospital, Sydney.

Main, Harry Findlay, M.B. of Ch. B. Melb., to be Public Vaccinator at Malmesbury, Vic.

Manson, John Frederick William, M.B. of Ch. B. Melb., to be a Public Vaccinator at Dunolly, Vic.

Moore, John Brook, L.K.Q.C.P. Irel., L.R.S.I., appointed Resident Surgeon at the Bathurst Hospital, N.S.W.

Peare, Humphreys Robert Henry, L.K.Q.C.P. Irel., to be Health Officer for Macarthur, Vic.

Rowling, Charles Edward, M.R.C.S.E., L.R.C.P. Ed., to be Government Medical Officer and Vaccinator for the district of Bellinger River, N.S.W.

Souter, Charles H. J., M.B. of Ch. M., to be Government Medical Officer and Vaccinator for the district of Hillston, N.S.W.

Sutton, Alfred, M.R.C.S.E., to be Government Medical Officer at Beenleigh, Qu.

Sutton, Charles Stanford, M.B. of Ch. B. Melb., to be Government Medical Officer at Muttaborra, Qu.

Swindells, John Adam, M.R.C.S.E., to be a Public Vaccinator at Tannunda, S.A.

Webb, William Simpson, M.R.C.S.E., L.R.C.P. Ed., to be Government Medical Officer at Southport, Qu.

Williams, John Traherne, M.R.O.S. Eng., L.R.C.P. Edin., to be Government Medical Officer at Ayr, Qu.

Wright, Alfred Figg, L.R.C.P. Edin., L.F.P.S. Glas., to be Health Officer for the Port of Westport, N.Z.

#### PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners by the respective Boards:—

##### NEW SOUTH WALES.

Moore, John Brook, L.K.Q.C.P., Irel., 1887; L.R.C.S., Irel., 1887.  
Ward, John, M.D., St. Andrews, 1863; M.R.C.S., Eng., 1863.  
Belson, George de Veille, L.R.C.P., Lond., 188; M.R.C.S., Eng., 1887.  
Stevenson, James Robert, M.B. Univ., Edin., 1882; M.S., Univ. Edin., 1882.

##### For additional registration:—

Rutledge, David Dunlop, M.Ch., Univ., Sydney, 1888.  
Walley, Thomas Bennett, F.R.C.S., Irel., 1887.

##### NEW ZEALAND.

Bahnsen, Valdemar, M.D., of Ch.D., Univ. Copenhagen.

##### SOUTH AUSTRALIA.

Swindells, John Adam, M.R.C.S. Eng., 1879.

##### VICTORIA.

Peare, Humphreys Robert Henry, L. of L. Mid. K.Q.C.P. Irel., 1887.  
Sandford, Arthur William, L. of L. Mid. R.C.P. of R.C.S. Edin., 1887; L.F.P.S. Glas., 1887.  
Rinder, Alfred William, L. of L. Mid. R.C.P. of R.C.S. Edin., 1886; M.R.C.P. Edin., 1887; L.F.P.S. Glas., 1886.  
Downie, Thomas Taylor, M.B. of Ch. M. Glas., 1887.  
Flynn, John, M.B. 1885, Ch.M. 1886, R. Univ. Irel.  
Reed, Henry Albert, L.S.A., Lond., 1884; M.R.C.S. Eng., 1885; L.R.C.P. Lond., 1886.  
Blyth, David, M.B. of Ch. M. Glas., 1880.  
Sergeant, George M.R.C.S. Eng., 1881; L.S.A. Lond., 1882.  
Pestell, James Hutcheson, L. of L. Mid. R.C.P. of R.C.S. Edin., 1888; L.F.P.S. Glas., 1888.  
Turnley, George Washington, M.R.C.S. Eng., 1858.  
McMullen, James Carnegie, L.R.C.S. Irel., 1881; L. of L. Mid. K.Q.C.P. Irel., 1881.  
Abramowski, Otto Louis Moritz, M.D. Berlin, 1876; Staats Examen, 1876.

## REPORTED MORTALITY FOR THE MONTH OF AUGUST, 1888.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Group and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
<b>N. S. WALES.</b>														
Sydney .....	132,846	322	165	55	3	2	4	...	...	2	21	16	4	3
Suburbs .....	215,849	936	285	96	2	4	16	...	9	2	32	10	11	6
<b>NEW ZEALAND.</b>														
Auckland .....	35,639	93	30		...	1	2	...	...	2	2	3	...	1
Christchurch .....	16,217	27	19		...	...	...	...	1	...	1	2	...	...
Dunedin .....	24,334	53	20		...	...	...	...	...	...	1	2	2	...
Wellington .....	28,235	94	26		...	...	6	...	...	...	1	4	1	...
<b>QUEENSLAND.</b>														
Brisbane .....	51,689	206	71	16	}	...	6	..	5	5	11	5	...	4
Suburbs .....	21,960	129	26	18										
<b>SOUTH AUSTRALIA.</b>														
Adelaide .....	310,283	959	339	115	...	...	14	1	4	2	29	26	9	2
Adelaide .....	43,527	122	78	18	...	...	5	...	1	...	11	5	3	1
<b>TASMANIA.</b>														
Hobart .....	32,051	97	71	20	...	...	2	...	...	...	8	7	2	1
Launceston .....	20,193	47	24	12	...	...	1	...	...	1	1	1	1	1
Country Districts .....	92,821	252	84	...	...	...	5	...	...	3	...	...	...	...
<b>VICTORIA.</b>														
Melbourne .....	69,774	196	80	} 189	...	1	27	...	9	5	69	50	20	12
Suburbs .....	275,606	1,275	547											

## METEOROLOGICAL OBSERVATIONS FOR AUGUST, 1888.

STATIONS.	THERMOMETER.				Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.		Depth.	Days.		
						Inches			
Adelaide—Lat. 34° 55' 33" S.; Long. 138° 36' E. ....	...	...	...	...	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S.; Long. 174° 49' 2" E. ....	122	63.0	53.5	43	...	3.400	21	79	...
Brisbane—Lat. 27° 28' 3" S.; Long. 153° 16' 15" E. ....	140.7	82.9	60.3	40.2	30.158	0.672	5	60	s.
Christchurch—Lat. 43° 32' 16" S.; Long. 172° 38' 59" E. ....	125	64.2	45.6	32.4	...	6.112	20	78	...
Dunedin—Lat. 45° 52' 11" S.; Long. 170° 31' 11" E. ....	101	58	43.8	31	...	10.724	20	84	...
Hobart—Lat. 42° 53' 32" S.; Long. 147° 22' 20" E. ....	...	62.3	47.5	30.7	29.963	1.75	20	82	...
Launceston—Lat. 41° 30' S.; Long. 147° 14' E. ....	...	60.2	47.7	27.5	30.024	2.28	14	75	...
Melbourne—Lat. 37° 49' 54" S.; Long. 144° 58' 42" E. ....	...	67.1	48.6	30	30.048	0.99	12	...	...
Sydney—Lat. 33° 51' 41" S.; Long. 151° 11' 49" E. ....	...	74.8	54.5	38.9	30.135	1.85	8	77	w.
Wellington—Lat. 41° 16' 25" S.; Long. 174° 47' 25" E. ....	120	62	50.2	40	...	5.290	21	82	...

# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### CONSUMPTIVE TRAVELLERS.

By G. R. MACMULLEN, M.A., LL.D. UNIV.  
DUB., BARRISTER-AT-LAW.

THE lay public is, no doubt, well acquainted with the appearance of persons suffering from the disease popularly known as consumption, or phthisis, and as this paper by no means aims at being a medical essay on that distressing complaint, there will be no attempt to describe it and its variations scientifically.

The writer writes as a layman to laymen on a subject upon which he has thought much, and which he feels confident may be profitably discussed with regard to the object he has in view, in a non-scientific manner.

Now that travelling has become so general by sea and land, there will doubtless be many readers of this paper who will remember having made a voyage in company with phthisical patients, possibly having been associated with one or more as fellow cabin passengers. It is to such as have experienced this latter that I specially direct my remarks.

One secures a berth in a cabin (be it in a two, three, or four-berth cabin) in a steamer or sailing ship bound, say from London to Australia. He goes on board, settles down, meets his fellow voyagers, and finds that luck has associated him for the voyage with a highly consumptive companion.

The cabin is most likely very small (in no case large), for the size of a ship is no criterion as to the size of her cabins, even the largest vessels, especially steamers, having, as a rule, very small cabins, in order to accommodate the greatest number of passengers possible on board.

Naturally enough, the consumptive man will have a considerable dread of ventilation, at least such an amount of it as a healthy man would desire; and so at the very outset the healthy and ailing find their wishes not in accord.

What follows? The healthy man, doubtless prompted by those feelings of humanity which generally contemplate suffering of any sort with pity, will probably waive any objections in favour of the invalid, with what danger to his own health I hope to be able to show. Should he, on the other hand, insist on treating his companion as a person in ordinary health, he feels a sense of reproach, however justifiable under the circumstances his conduct may be; and the invalid, if

his complaint be not really intensified, at least feels the *dread* of its being increased, and, of course, a corresponding amount of mental anxiety; so that the relations between the persons (supposing there are only two in a cabin) must necessarily be strained at the outset—a state of affairs which by no means adds to the pleasantness of the trip—and I may say here that there is the greatest difficulty (usually it is quite impossible) to change one's cabin during the passage.

In the old days the pathology of phthisis was by no means so advanced as at present, but the disease is now known, roughly speaking, to be caused by a specific microbe, and to be undoubtedly communicable by contagion. I do not think that this contention will be seriously combated by any scientific investigator.

It is possible of course, as appears in other cases, that though A may contract a disease from B, yet C, though having undergone the same risk as A, may nevertheless escape. But the result of C's risk is none the less problematical. Seed may spring and flourish in one soil, yet die in another; and it is a well-observed fact that different men have different constitutional dispositions for the reception and propagation of disease. It is the opinion of the profession generally that it is the *predisposition* to tuberculosis which is inherited and not the disease itself; but there is always the possibility, nay, likelihood of a healthy person contracting this dread complaint if exposed to contagion. Medical men will often say to a phthisical patient, even in very advanced stages of the disease, "I advise you to take a trip to the Antipodes," and there perhaps they feel their responsibility ends. The patient, full of hope (sanguineness as to recovery being a characteristic of phthisis), accepts the advice, secures a passage, and leaves on his voyage.

I will not now enter into the question of the propriety of sending a patient in an advanced stage of consumption upon a long voyage, with the numerous and sudden changes of temperature and the various hardships and fatigues which even on board the finest vessels are still unavoidable, but speaking from personal experience I can say that a long voyage is very frequently fatal to persons in an advanced phthisical condition. No doubt such persons would have died at home, but the fact remains that a long voyage in extreme cases frequently hastens the end. Now it may be well before suggesting a remedy for a state of things which should long ago have ceased to exist, to give a few particulars of this appalling and unfortunately very prevalent disease. I

shall not attempt to describe all the different methods by which it may be induced or the numerous variations of the disease, comprised under the general head of phthisis, but will content myself with the enumeration of certain facts, which perhaps may bring travellers generally to acknowledge the serious danger of consorting with phthisical persons for weeks or months in confined spaces, such as ships' cabins. To show the importance attached to the investigation of this disease and the amount of research expended upon it, I may say that in Quain's well-known dictionary of medicine, 16 closely printed pages are devoted to its discussion, and it is needless to mention the innumerable works which have appeared on the subject, one of the latest being "Micro-parasites in Disease," a compilation of learned essays on bacteria, translated from various distinguished continental authors and published by the New Sydenham Society.

I shall now give an extract from an essay appearing in the last-named work, by Dr. Robert Koch, of Berlin (the discoverer in 1882 of the tubercle-bacillus), on the "Etiology of Tuberculosis," and the remarks of such an acknowledged authority will no doubt bear corresponding weight. At page 187 he says, "If we now enquire how far phthisis may occasion the transference of tubercle-bacilli from diseased to healthy subjects, it is very evident that all the conditions for the distribution of the infective material in very large quantities are here present. It is necessary only to remember that on an average one-seventh of mankind die of phthisis, and that most phthisical patients eject for at least some weeks, often for whole months, large quantities of sputa containing immense numbers of spore-bearing tubercle-bacilli. Most of these countless infective germs, which are scattered everywhere, on the floor, on articles of clothing, &c., perish without finding an opportunity of settling again in a living host. But if we further bear in mind the results of Fischer and Schill's experiments, from which it is seen that tubercle-bacilli may retain the virulence for forty-three days in putrifying sputum and for one hundred and eighty-six days in sputum dried at the ordinary temperature of the air, i.e., if we remember the immense number of tubercle-bacilli derived from phthisical patients, and as we have just seen their tenacity of life both in a moist and in a dry condition, a sufficient explanation is afforded of the very wide distribution of the tubercular virus. There can likewise be no doubt as to the manner in which the tubercular virus is carried from phthisical to healthy subjects. By the force of the patient's cough particles of

tenacious sputum are dislodged, discharged into the air and so scattered to some extent. Now numerous experiments have shown that the inhalation of scattered particles of phthisical sputum causes tuberculosis with absolute certainty, not only in animals easily susceptible to the disease, but in those also which have much more power of resisting it. It is not to be supposed that man would be an exception to the rule but, on the contrary we may surmise that any healthy person brought into immediate contact with a phthisical patient and inhaling the fragments of fresh sputum discharged into the air may be thereby infected.

"But probably infection will not often take place in this way, because the particles of sputum are not small enough to remain suspended in the air for any length of time. Dried sputum on the contrary is much more likely to cause infection, as, owing to the negligence with which the expectoration of phthisical patients is treated, it must evidently enter into the atmosphere in considerable quantities. The sputum is not only ejected directly on to the floor, there to dry up, to be pulverised and to rise again in the form of dust, but a good deal of it dries on bed linen, articles of clothing, and especially *pocket handkerchieves*, which even the cleanliest of patients cannot help soiling with the dangerous infective material when wiping the mouth after expectoration, and also is subsequently scattered as dust.

\* \* \* \* \*

"One can hardly imagine a more favourable contrivance for the distribution of the sputum as dust than that of allowing it to dry rapidly on stuff garments from which at each movement fibres fly off and carry the infective material into the air, where they remain suspended for some time; and when at last they fall to the ground the particles are easily caught up again by the slightest breath of air.

"The examinations of air undertaken by Hesse are very instructive on this point, and confirm fully what I have just stated. As already mentioned, dried sputum may retain its virulence for months, perhaps for much longer under some circumstances. The time probably depends on whether or not the tubercle-bacilli contain well developed spores capable of germinating.

"But supposing the virulence of the dried sputum to last only for some weeks, a phthisical patient is bound, under the circumstances in which these patients are at present generally found, to scatter around him a large quantity of infective material, and that in the form most likely to give rise to infection."

Many more extracts of a like nature might be made, but I think enough has been said to show

the communicability of this disease by contagion.

I may mention that one of the greatest investigators of phthisis (Laennec) *died from consumption, having contracted it by wounding himself while making a post-mortem examination of a tuberculous subject*, and many other cases are on record equally startling.

It may be said here that tuberculosis is by no means confined in area to the *lungs*, but may find a home in other viscera of the body.

Now, as regards a remedy for this state of affairs, I would suggest the following, which I do not think unreasonable though perhaps capable of amendment.

In the first place, all intending passengers should, on booking, be able to produce to the shipping agents (who should under penalty insist on its production) a medical certificate stating that the intending passenger is in good health, or if not so, the nature of his or her ailment. Secondly, the medical officer in charge of the ship should have the power to remove a passenger into the ship's hospital, which, in view of such contingency, would be properly fitted for the reception of patients. Of course, when a passenger occupies a whole cabin the rules would be relaxed. This would be no hardship to the patient, but a positive benefit, and would result in general convenience and satisfaction.

The certificate might be given by a physician appointed by the shipping company, or by the usual medical attendant of the intending passenger.

I feel convinced that if some such regulations were in force, travelling by sea would receive an additional attraction in the shape of comparative immunity from the dangers of infectious disease, which is far from being the case at present, especially as regards the particular complaint above discussed.

There may be difficulties in the way of bringing about such conditions, but some regulations of the sort should be instituted, and I shall be content if these lines fall under the eye of any whose ideas on the subject may agree with my own, and whose influence and inclination may enable them to assist in procuring a much-needed reform.

Melbourne, 17th October, 1888.

[We are pleased to publish this highly useful paper by a layman, and hope that the subject will be followed up by our professional readers. We will take care that the subject is brought under the notice of the Health Authorities of England and the various colonies, and we will also specially call the attention of the medical press to the subject.—Ed. A.M.G.]

## TWO CASES OF INDUCTION OF PREMATURE LABOUR.

(FOR DYSTOCIA FROM FIBROID TUMOUR AND FOR URÆMIA).

READ BEFORE THE MEDICAL SECTION OF THE ROYAL SOCIETY OF NEW SOUTH WALES.

By RALPH WORRALL, M.D., M.Ch., Hon. Assist. Surgeon to the Department for Diseases of Women at the Sydney Hospital.

In the two cases which I am about to narrate, labour was induced for widely different conditions, yet as the notes are brief, I have grouped them together in the hope that they would give rise to a profitable discussion.

The first case, which I saw with Dr. T. B. Clune, was Mrs. C., æt. 36, multipara, in the seventh month of pregnancy. At her last confinement, which took place in the country about 18 months previously, it was discovered that "a tumour blocked the passage," and delivery was finally effected by craniotomy after much suffering and delay. Her previous confinements had all been easy, and up to this time she had always considered herself in good health.

Upon discovering that she was again pregnant her physician advised her coming to Sydney, in order that premature labour might be induced. The patient thought the tumour had been steadily increasing.

On examination, a hard, moveable, globular-shaped fibroid was found occupying Douglas's pouch, connected with the posterior surface of the cervix uteri by a short but distinct pedicle, and blocking the cavity of the pelvis to the extent of about half its capacity.

The os uteri was pushed upwards behind the pubes, and was reached with difficulty.

Under chloroform, I attempted to push the tumour above the pelvic brim but could not succeed in doing so, I then proposed that the tumour should be removed per vaginam, and the pregnancy allowed to go on to full term; to this the patient would not consent, and I therefore reluctantly agreed to induce premature labour.

On June 15 a soft French bougie was introduced, and in ten hours labour pains set in vigorously; examination showed the os had dilated to about the size of half-a-crown, and that the head presented. I withdrew the bougie, but finding that the pains also withdrew I introduced another bougie on the evening of June 16; uterine action began again in about the same time (ten hours), and on the afternoon of the 17th I considered the os sufficiently open to permit of delivery. Turning was inadmissible,

as the liq. amnii had drained away during the night, I therefore applied the forceps after some trouble, the os being so high up and hidden by the tumour that each time I withdrew my finger I had some difficulty in discovering it again.

The placenta was attached in the lower uterine zone, and being accidentally separated to some extent by the forceps, profuse hæmorrhage was the result.

Persevering efforts failed to deliver the head with the forceps, and fearing lest I should injure the tumour and cause it to slough I proceeded to perforate, and eventually succeeded in effecting delivery with the cranioclast.

Shock, loss of blood, and acute bronchitis placed the patient's life in jeopardy for several days, but eventually she triumphed, and was able to return home within a month, feeling, as she said, "quite well."

The prognosis, in these cases of delivery obstructed by an incarcerated uterine myoma, is very bad for both mother and child. In this instance the mother's life was saved, yet I feel the destruction of a living child to be a proceeding unworthy of modern obstetrics, and I regret my suggestion to attempt the removal of the tumour by the vagina was not entertained.

In the second case labour was induced for uræmia. Mrs. H., æt. 34, married 12 years, seven children, last 14 months ago, no miscarriage, no illnesses, in the seventh of pregnancy; has suffered, from almost the beginning of this pregnancy, from severe headache, insomnia, serious failure of vision, œdema of the face in the morning and of the legs at night, and for the last two months has had complete left facial paralysis, which came on rather gradually; passes a large quantity of urine of normal specific gravity but highly albuminous, and containing numerous casts. All the above symptoms, including the facial paralysis, existed for the last six weeks of the last pregnancy, but disappeared a fortnight after delivery. The urine remained slightly albuminous for four months and then became normal. For these particulars I am indebted to Dr. Power.

In the presence of symptoms, which seemed in so marked a way to herald the onset of convulsions, I had no hesitation in agreeing with Dr. Power that induction of labour offered our patient the best chance of life. We were confirmed in this view by recalling that similar symptoms in the last pregnancy had rapidly disappeared after confinement.

A purge was at once administered, and at 6 p.m. on July 13 I introduced a French bougie. The nurse reported that the patient had had a slight convulsion two hours previously. On the

following day at 11 a.m., after three pains, the baby was born alive (only lived 24 hours). For the next three days she was in a drowsy, semi-comatose condition, pupils moderately contracted, pulse about 116, tongue coated, breath foul. On the fifth day she was much better; the facial paralysis had markedly improved, so that she was able to close the eye; albumen had diminished from a fourth to an eighth, and on the seventeenth day was a mere trace. On this day, against my advice, she left the nurse's house in which she had been confined, for her own home. Dr. Power tells me that the next week she caught a chill while attending to her household duties, and this was soon followed by a return of the dropsy and other symptoms. She died, in a comatose condition, exactly two months after delivery. That death was staved off by the induction of labour is plain, that it might have been indefinitely postponed had proper care been exercised, is highly probable.

The close relation between the facial paralysis and the uræmic symptoms is a remarkable feature in this case and worthy of discussion.

When we consider how perilous to the patient and how distressing to her friends is the condition of eclampsia, and when we recall how frequently the albuminuria of pregnancy leads to chronic nephritis, we must I think regard an examination of the urine of all pregnant women coming under our notice as a duty not to be shirked, and should such an examination disclose the presence of albumen, constant, increasing, and unaffected by treatment, I submit we are justified in proposing to cut short the pregnancy, which if it has not originated the disease, yet cannot fail to affect it disastrously.

I shall not weary you by reiterating the various theories which have been advanced to account for the frequent association of uræmic symptoms with pregnancy; to me, pressure, or rather increased intra-abdominal pressure, seems the most important of several factors. If it is not, then why does eclampsia occur so much more frequently in primiparæ, and in elderly primiparæ, and in contracted pelves, and in plural births? Why does the albumen increase during convulsions, and during labour, and diminish so markedly after convulsions and after delivery?

Pressure then exercising so baneful an influence, a plan of treatment which removes it commends itself to reason, and although the induction of premature labour is a procedure not devoid of danger, yet if we are guided by the rule, "of two evils choose the least," we shall not hesitate to resort to it in these cases.

I shall not go into the different methods of inducing labour, but shall content myself with

describing that one which I have followed, and which I believe to be by far the best. The vagina is carefully irrigated with warm carbolic lotion through the speculum, and sufficient of the lotion allowed to remain in the bottom of the speculum to cover the os. A new, carefully cleansed French bougie, smeared with glycerine, is then passed through the pool of lotion into the uterine cavity, about two inches of the end being left out to rest against the posterior vaginal wall. The patient is confined to bed and the bougie allowed to remain until uterine action is well established. In this way the danger of septicæmia is reduced to a minimum, and the other danger, separation of the placenta, may be guarded against by insinuating the bougie gently, and withdrawing it slightly when any obstruction is encountered.

### THE TREATMENT OF TYPHOID FEVER IN ITS EARLY STAGES.

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IN view of all that has recently been written in the *Australasian Medical Gazette* concerning the treatment of enteric fever, the present may not be an inappropriate time to draw attention to a plan of treatment adapted to cases which are seen in the early stages of the disease, say before the ninth day, and which I have found to be successful in aborting the disease in every case in which I have given it a fair trial. The plan may be found mentioned in the *British Medical Journal* of January 31, 1885, by a Swedish physician, if my memory serves me rightly (for I have not the files of the journal by me), and consists of the inunction of ung. hydrarg. one gramme every night rubbed into the abdomen and thighs alternately, for six nights, for half an hour each night. A few calomel and opium pills are given occasionally according to the state of the bowels, and alcohol is advised to be given methodically, although to this last I have not adhered. With regard to the calomel and opium, I have usually given a grain of opium with two or three of calomel every second night, increasing the dose of calomel where the bowels were confined, or of opium where they were loose.

During the close of 1886 and the commencement of 1887 I had ample opportunities of testing the value of the method; and the results, in all cases where I was clear as to the date of the disease, were eminently satisfactory. The temperature fell to normal in two or three days, and in five or six days from the commencement of the

treatment all other symptoms had disappeared.

These cases might, of course, be classed as febricula, but one or two instances occurred which render that hypothesis to my mind unsatisfactory. In one house, a child of four first fell ill. She was not seen by me until the end of the second week. She had a very severe attack, and narrowly escaped with her life. Whilst I was attending upon this case, the mother, who was nursing the child, and also two elder children who were in the house, showed undoubted symptoms of enteric fever, with considerable rise of temperature. All three were put under this treatment at once. The symptoms rapidly disappeared, and none of them were in bed more than five or six days. The father next fell ill with precisely the same symptoms, but having to go away on urgent business, refused all treatment. He, however, returned in a few days with the symptoms fully developed, and he ultimately died of the disease. Two servant girls in the house also suffered, but neither said anything about her symptoms until in the third week; one had an ordinary attack, the other a severe one, but both ultimately recovered.

In another house a young child first had a very severe attack. The mother and the servant both developed decided symptoms, but being put under treatment were convalescent in a few days. In many isolated cases seen in the early stage it was equally successful, although, of course, these are more open to question on the hypothesis of febricula.

The treatment has the recommendation of simplicity and freedom from danger, and the conclusion that I cannot help drawing from my experience of it is, that in it we have a valuable and efficient weapon against the disorder in its early stages. Should any of your readers care to try it, I hope that they will tell us in some future number of the *Gazette* the results obtained by them.

### CALCULUS IN THE BLADDER, WITH CONSIDERATIONS AS TO WHICH OF THE THREE LEADING OPERA- TIONS SHOULD BE PERFORMED.

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IN view of the importance of the subject of "Urinary calculus," a consideration of it from an Australian point of view, and the compilation of some statistics bearing upon it, may be of interest

to the members of the medical profession in this country. In treating of the subject four cases of lithotomy and one of litholapaxy will be briefly stated.

I.—T.G., æt. 48 years, formerly a coal-miner, now a storekeeper, married, native of north of England. A healthy man, in whom the phenomena attendant upon a vesical calculus had been developing with increasing severity for eleven years, their advent being accurately defined by an attack of renal colic. An examination of the bladder with a sound left no doubt as to the meaning of the prevailing symptoms, and enabled a demonstration to be given of the presence of a hard stone in the viscus. The apparent hardness of the calculus led to a decision being arrived at to adopt the operation of lateral lithotomy for its removal, and the instructions followed were mainly those given in Prof. Spence's surgical work. The operation was performed with the ordinary amount of ease, no difficulties being met with beyond those commonly occurring in the removal of a calculus of equal size through a normally constructed perineum. A rough, hard calculus, weighing 444 grains, and composed of oxalate of lime, was the outcome. The after progress of the case was interfered with by a rigor upon the second day, and by four attacks of epididymidis, occurring in each testicle alternately, during a period of three weeks. A lithotomy tube was used during the first forty-eight hours. The pulse never exceeded 100 nor the temperature 99° F., except during the rigor. Want of sleep constituted the most grave inconvenience from which the patient suffered, and no drug was found to overcome this complication so well as a drachm of tincture of hyoscyamus at night time. The urine passed by the urethra upon the twelfth day after the operation, and upon the twenty-seventh day he was out of bed. From this he made an excellent recovery, and he is now in the best of health, four and a half years after the date of his being laid up.

Case II.—J.P., æt. 4½ years, native of Lambton. His parents described signs and symptoms similar to those occurring in children suffering from stone in the bladder, especially stating that he could never make water without great straining, which caused the bowels to act and the rectum to be prolapsed. The indications were confirmed by an examination under chloroform, and a definite course was laid down as to treatment; this was that lateral lithotomy should be resorted to in order to effect a cure. The abdominal muscles in this, as in the preceding case, were found to be much more lax than in healthy persons of the same class. This allowed of a bimanual examination being made from the

rectum to above the pubis with much more ease, also of a recto-vesico-abdominal examination. By the sense of touch the calculus appeared to be about the size of a green almond. I have not seen this last named method of diagnosis mentioned in any book, and it might be of much advantage to a beginner, who requires all the aids within his reach, to enable him to satisfy his own mind that he is making no mistake. It can be practised with facility by placing a finger in the rectum, a sound in the bladder, and a hand on the abdomen. The sound—one rather longer than ordinary for the purpose—can be held between the lips, and if any foreign body be felt in the bladder the finger can press it against the metal point to ascertain its nature, or an assistant can lightly hold the sound. If this course be adopted there would be a certain amount of danger of the point of the instrument being pressed against the bladder wall, the co-ordinating influence being absent which enables oneself to use separate portions of his body in unison and with requisite delicacy of manipulation. This is a more readily applied method, and it would serve the same ends as the microphone written of by Sir Henry Thompson in 1887, or by J. McK. Davidson in 1882 and 1883. The simplicity and readiness with which a long sound can be used in the manner described can only be appreciated after it has been practised. A recent manoeuvre suggested by Surgeon Major P. J. Freyer, for purposes of diagnosis, consists in the use of an aspirator and canula. The instrument being used in the ordinary way, any stone contained in the viscus would almost certainly, during the exit of the fluid, strike against the metal point, and be both felt and heard by the surgeon.

The patient was a healthy boy up to eleven months old, when he began to suffer with his water, since then the trouble from the affection increased until the time of the operation. The ordinary procedure as for a left lateral lithotomy was adopted, with the result that a stone was extracted in a few minutes without difficulty. He progressed well to convalescence and in thirteen days he was out of bed. He rapidly regained the healthy state which he had lost during his sufferings, and now—three years and a half after the operation—he is a perfectly strong lad. The subsequent history of this case, as in the boys that follow, will be interesting in regard to whether impotence follows this procedure.

Case III.—J.P., æt. 6 years; residence, Lambton; birth-place, Lambton. The parents gave a history of his affection which indicated the presence of a stone in the bladder for about three years. During the whole of the time the usual pheno-



mena have increased in intensity, so that when he was brought to me, and the condition was explained, there was no objection placed in the way of adopting measures for his immediate relief. He was never a strong child, but his health had been rapidly deteriorating during the few months before he came under my notice. At each attempt to make water the straining and attendant pain were extreme, the bowel prolapsed for two inches, and he was the picture of suffering. In regard to diagnosis in this case, the one infallible sign of a ring upon striking the stone could never be felt or heard, and it was only by the abdomino-rectal and abdomino-recto-vesical examinations that I convinced myself of the presence of a pathological mass in the interior of the bladder. The dictum laid down by most great surgeons that "you should not operate for stone in the bladder unless you are able to get a stony ring with a sound" was fully allowed for, but the weight of evidence, subjective and objective, was so preponderant on the side of an operation that no difficulty was felt in advising that such should be had recourse to. The surface of the calculus was about as rough as rough sand-paper.

*Operation*.—The left lateral section of the perineum and the prostate was the one followed for reaching the interior of the bladder, the only difficulty experienced being the passing of the finger into the bladder after cutting through the prostate and vesical neck. There was a dense band which I could not dilate, and in which the incision required to be enlarged three times.

His after progress was very satisfactory. Upon the third day after the operation his bowels acted freely without any prolapse of the rectum—the first time for more than twelve months. Water passed by the urethra upon the seventh day; this was accompanied by a slight rise of temperature, which soon abated.

The calculus was composed of phosphates arranged concentrically around a nucleus of uric acid. For some months after the operation he suffered from incontinence of urine; from that he has since recovered.

*Case IV.*—G.H., *æt.* 2 years and 7 months; residence, Minmi; birthplace, Minmi. He had suffered for twelve months from trouble with his water, and at each attempt to make it, he caught hold of the end of the penis, pulled the foreskin, and had much straining. His parents were healthy, and he had suffered from no disease other than that for which he was brought under notice.

The left lateral operation was the one adopted. Two difficulties presented themselves during the operation; the first: owing to the narrow interval between the rami of the ischii, there was not

sufficient room for my finger to lie at the side of the staff as a guide for the knife when seeking the groove upon which to open the urethra, and to incise the prostate; the second: the forceps could not be made to grasp the stone. By placing my hand above the pubis I was enabled to press the calculus into the opening in the prostate; an assistant kept it in this position, and by passing a straight forceps the body was at once caught and removed. This manoeuvre was expeditious and of good service. A drainage tube was fixed in the wound, and the progress of the case was satisfactory, hiccupping during the first twelve hours being the only trouble. The calculus was composed of urates, was almond-shaped, and weighed 96 grains.

*Case V.*—Litholapaxy.—R.H., *æt.* 66 years; residence, Wallsend; birthplace, Wales; a coal miner; married; a healthy man who has lived for many years with his family in Wallsend. For two years he had been troubled with a desire to make water frequently both day and night. During several months he noticed that he was passing solid pieces along the urethra. Some of these he brought with him to show me. Upon making a chemical and microscopic examination of the urine it was found to be alkaline, with phosphates, mucous, and pus cells, also containing microscopic pieces of mucous membrane from the irritated bladder wall. An exploration of the bladder with a sound demonstrated the presence of a soft calculus in the viscus. This, then, was probably the cause of the indications of a cystitis found in the urine.

Owing to the age of the patient, the nature and size of the stone, and the brilliant results which have of late followed the crushing at one sitting, I advised litholapaxy after Bigelow's method as the desirable procedure to be followed in this case.

16th May, 1888.—Drs. A. W. Nash, Stapleton, and Ody assisted me during the operation. Two lithotrites, a fenestrated, and non-fenestrated, were used, and the particles were removed after crushing by means of a Clover's aspirator. The lithotrites were introduced five times in all, and the catheter four times. By these means the whole stone was broken down and removed. The operation occupied about 35 minutes.

17th May.—12 noon. Temperature, 99.4° F.; pulse, 72. I found him lying on the bed with his clothes on. He had passed a good night. He complained of a soreness in the urethra, but he had no pain after making water.

18th May.—12 noon. Temperature, 98.6° F.; pulse, 74. He had not to get up during the night to make water. He micturated this morning without pain or trouble of any kind. Soreness in penis almost gone.

19th May.—He was walking about the town during the morning. He is quite free from trouble with his urine.

22nd May.—Quite well. He resumed his work as a coal miner this morning.

14th October.—According to his own statement to-day, he makes his water as well now as when he was twenty years old. Since May he has passed three pieces of stone, each about the size of half a small pea. These gave him no trouble. He has never to get up at night, and during the day he is as well as any other healthy man.

Brilliant as have been the results of lithotomy operations in the hands of masters in the surgical art, was there ever a case in a man of mature years where, seven days after the removal of the calculus, the patient was enabled to return to an arduous employment? Safely may we answer in the negative.

Classical and historical as is "cutting for the stone," scientific as are the principles upon which it is based, anatomically accurate and well-defined as the route is from the perineum to the bladder, yet daily is it becoming more apparent that the time honored proceeding must be superseded by the removal of the calculus per vias naturales with the aid of improved instruments. This is the opinion of leading British surgeons, some of whom have achieved their greatest successes with the cutting operation; their leanings, they admit, are against the new method, as fighting for an old friend, but in the face of incontrovertible results they must fall in with the improvements of the times.

The main objection to the proceeding is "there is more likelihood of a recurrence than after a lithotomy," sufficient time has not elapsed since the introduction of the new method of removing

the stone, but granted the recurrence be more frequent, were it not better for a man to undergo two operations from which he would recover in seven days, with slight risk, than to submit to a more radical treatment from which he could not recover under three or four weeks, and with considerably greater risk?

Besides the foregoing five cases which have demanded a major operation, two others have come under my notice.

1. A man, aged 40 years, came to my consulting room and complained of trouble with his urine. I passed a sound, found a small stone, and next morning he passed a calculus about the size of a pea.

2. A baby, *æt.* 12 months, was brought to me early one morning, with an obstruction to the outflow of its urine. The preputial orifice was narrow, so I slit up the prepuce, and a white body was found to be filling up the urethra just behind the external orifice; a slight cut in the lower margin of the meatus allowed a small calculus to be pressed out. It was composed of phosphates the size of a small pea, and weighed one grain.

The following table shows the number of cases of stone in the bladder that I have been able to collect as having been treated in the Newcastle district during the past ten years; all the patients are either natives of the district, or they have contracted the disease while living in it; except two, all were under twelve years of age; only one was treated by other operation than the left lateral lithotomy. Of the nine calculi wherein the weight is shown, the average is 372½ grains.

Eleven cases in ten years, in a district where the population for the whole time has not exceeded twenty thousand per annum, is large when compared with similar statistics from elsewhere.

#### CASES OF STONE IN THE BLADDER IN NEWCASTLE DISTRICT DURING LAST DECADE.

No.	Name.	Sex.	Age.	Days in bed after Operation.	Operations performed.	Variety of Calculus.	Weight of Calculus in grains.	Duration of disease.	Operator.	Result.
1	P.	Male	11 y.	21 days	Left lateral lithotomy	Urates	240 grains	...	Dr. A. Nash, sen.	Good
2	W.T.	"	7 "	...	"	Oxalates	155 "	...	Dr. J. Harris	"
3	S.W.	"	5 "	...	"	Oxalates	86 "	...	"	"
4	A.G.	"	...	...	"	Phosphates and uric acid nucleus	1920 "	...	Dr. Hedley	"
5	...	"	...	...	"	Uric acid	...	...	Dr. Massey	"
6	K.	"	3 y.	...	"	Oxalate of lime	...	...	Dr. Beeston	"
7	T.G.	"	48 "	27 days	"	Oxate of lime	444 grains	7 years	Dr. J. B. Nash	"
8	J.O.	"	4½ "	13 "	"	Urate of soda	43 "	3½ "	"	"
9	J.P.	"	6 "	21 "	"	Phosphates and uric acid nucleus	111 "	3 "	"	"
10	G.H.	"	2½ "	9 "	"	Urates	96 "	2 "	"	"
11	R.H.	"	66 "	1 day	Litholopaxy	Phosphates	258 "	1 year	"	Excellent

As to variety of operation. In any general consideration of the subject of calculus in the bladder by a surgeon, the variety of operation to be chosen for each individual case forms an important factor; of late this point has been given much attention. The revival of the supra-pubic operation, with the continuous and weighty support that has been accorded to it by eminent surgeons; the extensive application of litholapaxy by the Indian surgeons to the cases occurring, not only in men, but also in children down to ten months old, would cause one to analyse much more carefully than formerly, the consistence, size, and general characters of any stone in the bladder, before proceeding with the lateral operation even in children. Those varieties of operation which have been practised, and vaunted as superior, by some single surgeon, but which have not impressed many other members of the profession favourably, such as Furneaux Jordan's incising the urethra and prostate upwards; and others may be passed over as being obsolete or not equal in any leading respects to the methods most in use. One would have to choose between the three operations that have stood the test of time and which now hold the pride of place, viz., lateral lithotomy, suprapubic cystotomy and litholapaxy; the first named held the premier position for a long period as the most successful and generally used. In the light of the present day, when one looks at the successes and advantages of the litholapaxies of Surgeons-Major Keegan and Freyer, it would appear that the time-honored operation will be much less frequently used in the future. In this relation I might quote the opinions of some authorities who wrote after the introduction of Bigelow's method of removing a stone at a single sitting. Dr. Geo. Buchanan, of Glasgow, said:—"Lithotomy will gradually be abandoned, except in cases of an exceptional nature as regards the stone and the patient." A note of warning, not to expect too much from the new operation, is sounded by Mr. Thos. Smith, of St. Bartholomew's, in an article in the *Lancet* in 1880:—" . . . for you must know that while lithotripsy can be credited with real cures, both of the stone and its symptoms, cases do occur in which the irritation set up by the lithotrite gives far more trouble to the patient than did his original stone," he makes no mention of what the troubles are. A more recent writer, to whom, from his exceptional experience, great attention should be paid (Surgeon-Major B. C. Keelan of Sind, India), states that he has a collection of 1,000 calculi, which in five years more he expects to be not less than 2,000. His paper relates of 188 cases operated upon during twelve months,

of these no death took place amongst 105 persons under 25 years, and eight deaths out of 83 operations in patients between 26 and 70 years; this mortality experience corresponds to the experience of authorities in Great Britain. In his hospital "lithotripsy is only undertaken when the stone is small and soft," he says, that it is next to impossible to remove a large stone by this method at one sitting and it only leads to bad results; further, he has tried lithotripsy (he does not say litholapaxy), and he is glad that he has abandoned it. A more recent communication still by Surgeon-Major P. J. Freyer, Bengal Medical Service, who has performed 321 operations for calculus in the bladder, shows a change in an opinion which contrasts strongly with the preceding. "I have now to acknowledge a very considerable modification in the position hitherto assumed by me in my writings regarding litholapaxy in male children. I have heretofore advocated lithotomy in such patients in preference of litholapaxy. I based my opposition . . . . . owing to the undeveloped state of the genito-urinary organs, but mainly on the success of lithotomy in children." In his last 100 cases he has performed 77 litholapaxies, 22 lithotomies, and one supra-pubic cystotomy, all with success; 16 of the litholapaxies were in male children, the youngest being 3½ years, and the calculus removed weighed 14 grains. A comparison of the opinions of leaders of thought upon the selection of an operation in 1880 and 1887, would indicate that those who, thinking over the method philosophically worked out and advocated by Bigelow, foresaw for the new procedure a brilliant future were correct, yet their brightest hopes have not been fulfilled. Sir Henry Thompson, in his work (*Clinical Lectures on Diseases of the Urinary Organs*, 1883), says at page 73-2: "All patients with stone under puberty, with few exceptions, are to be cut," *et idem*, "Cases of stone occurring in patients beyond the age of puberty should be operated upon by lithotripsy, with few exceptions; exception, stone too hard and too large," further on page 75-2, "lithotomy for adults must some day disappear;" at page 96 he reports a series of 112 cases of lithotripsy at a single sitting in males whose mean age was over 62½ years, with only three deaths; "never I believe in the history of surgery has it hitherto fallen to the lot of any man to operate for the stone on 112 elderly male patients with only three fatal cases." In view of the instrumental developments of the past few years we may reasonably expect that the expectations of such a distinguished autho-

rity upon the subject will be reached, and his experience in regard to successes exceeded, by surgeons who have often to deal with the affection. In a subsequent chapter in his work Sir Henry impresses upon his readers the greater necessity there is now for early diagnosis in cases of stone in the bladder, for "lithotomy must in future be rejected for all stones that are of moderate size," he is hopeful that with an increase in facility and skill in diagnosis, the extermination of stone in the adult may result. Writing in 1888 in regard to Bigelow's operation he says, "the proposal diminishes somewhat the risks and leaves the bladder in a better condition afterwards."

In relation to supra-pubic lithotomy, eminent surgeons of late have been writing upon the subject, and they have been producing cases in support of their statements; foremost amongst these are Sir Henry Thompson, Sir W. McCormac, and Professor Annandale. Mr. Twynam, in an article in this journal for October, having dealt fully with the improvements that have been used to facilitate procedure in this operation, I can pass over this which formed a part of my article. The authorities

mentioned above seem to agree that this is the operation to be chosen in cases where the stone is hard, is above two ounces in weight, or is irregular in shape, *i.e.*, in those cases where litholapaxy or lithotomy are doubtfully applicable, though the possibilities of the crushing operation are not confined by these limits in the hands of those who have much practice at it. The period required for convalescence after the high variety of treatment is longer than after the other methods, and the attacks of high temperature, suppuration, and other sequelæ which would cause anxiety, are more frequent. I have collected a number of cases for comparison, and from an article by Mr. Twynam in the October number of this journal I have culled a few which previously had been unpublished. The tables which follow will serve to show in a clear form a comparison in some important points in the three standard operations for stone. One table refers exclusively to persons under 16 years of age in India, and under 21 in Great Britain and the colonies, the second table deals only with those above these ages. As to the number of days in the hospital I have preferred not to average the cases, as this does not give so clear a perception of the results.

#### CHILDREN AND YOUTHS.

Number of Cases.	Eldest.	Youngest.	NUMBER OF DAYS IN HOSPITAL AFTER OPERATION.				Weights of Calculi.	RESULT.		Death Rate.
			Over 20 days.	Between 10 and 20 days.	Between 5 and 10 days.	5 days and under.		Recovered.	Died.	
105	In 1st series, 14 yrs. 2nd series, 15 yrs. 3rd series, 13 yrs. 4th series, 11 years.	In 1st series, 14 yrs. 2nd series, 13 yrs. 3rd series, 11 yrs. 4th series, 11 months.	LITHOLAPAXIES.				700 grains to 5 grains.	104	1	0.952 %.
			1	18	15	70				
118	In 1st series, 16 years. 2nd series, 15 years.	In 1st series, 14 years. 2nd series, 1 year.	PERINEAL LITHOTOMIES.				840 grains to 12 grains.	118	...	Nil.
			8	110	...	...				
40	In 1st series, 16 years. 2nd series, 16 years. 3rd series, 21 years.	In 1st series, 12 years. 2nd series, 3 years. 3rd series, 14 months.	SUPRA-PUBIC LITHOTOMIES.				500 grains to 20 grains.	38	2	5 %.
			27	9	2	...				

A glance at this table shows that the recoveries after litholapaxy are much more rapid than from lateral lithotomy, and from this than from the supra-pubic operations; not only is this an important consideration for the patients and the surgeon, for rapid recoveries mean the occurrence of fewer complications in after treatment, but also the question of hospital economy is closely connected with the subject of rapid cures, and since

the great majority of cases of calculus in the bladder occur in persons who are the subjects of hospital treatment, it is worthy of a place in one's mind when thinking what operation it is advisable to perform. Mr. Bryant in his *Practice of Surgery*, 3rd ed., Vol. II., p. 90, says, "Calculus is seldom seen in the more opulent," he probably writes upon an experience of the disease in Great Britain, and the statement

doubtless would be equally true of other parts of the world where stone is commonly met with. The death rate amongst children and youths is

below one per cent. in the litholapaxy and lithotomy procedures while in the high variety it reaches to 5 per cent.

## ADULTS.

Number of Cases.	Eldest.	Youngest.	NUMBER OF DAYS IN HOSPITAL AFTER THE OPERATION.				Weights of Calculi.	RESULT.		Death Rate.
			Over 20 days.	Between 10 and 20 days.	Between 5 and 10 days.	5 days and under.		Recovered.	Died.	
63	82 yrs.	16 years (India).	LITHOLAPAXIES.				1,200 grains to 3 grains.	63	...	Nil.
			...	2	17	44				
102	70 yrs.	16 years (India).	PERINEAL LITHOTOMIES.				6,720 grains to 40 grains.	94	8	7.84 %.
			94	...	...	...				
44	76 yrs.	21 years	SUPRA-PUBIC LITHOTOMIES.				11,520 grains to 60 grains.	36	8	18.18 %.
			31	4	1	...				

This table speaks more for the crushing operation than does the preceding; not one of the 63 cases was over 20 days in the hospital, while the great majority occupied less than five days in effecting a recovery, these successes are what might be expected after studying Sir Henry Thompson's lectures, where he deals with lithotripsy at a single sitting. The death-rate after the cutting operations is so much in excess of that by removing the stone per urethram that this should be adopted where practicable. Litholapaxy must then be the operation of the future for the removal of stone from the bladder; it is destined to dethrone lateral lithotomy, which has done such noble service in its time for the relief of suffering humanity; like other great factors which have served the human race it must suffer its place to be taken by a better factor; more especially in adults is this the case, and more than a hope is held out that the death-rate will be reduced to a minimum, and the long-hoped for elysium in this relation may be on the point of being reached.

Such being the ideas to be deduced from the current literature of this subject during the past few years; reverting to my cases, what operation should be had recourse to in subsequent similar cases? All should be tried by crushing. In the first case this would have to be abandoned and lateral lithotomy adopted, for the stone was too hard for the lithotrite to break. Subsequent to its removal I tried two strong instruments several times on it without making other impression than

a slight mark. Forcible pressure was applied to the screw to get this result. One would hardly be justified in resorting to the supra-pubic method in view of the mortality which has attended the cases that have been lately published. Three of the cases were suitable for litholapaxy, and the convalescence would have been much shortened had this been successfully performed. At the time when it was necessary to remove these stones, so much light had not been thrown upon the method in children. Crushing has its drawbacks in places where the affection is only occasionally met with. To obtain the proper and necessary instruments would be difficult, if not impossible; the expense would be great; and unless one had practice in the operation upon the adult, he would find it hard to perform, when dealing with the narrow urethra of a child, and when requiring to crush the fragments to fine pieces which would pass along the evacuating catheter. Surgeon-Major P. J. Freyer does not think that a surgeon would be at all justified in performing the operation in a child till he had some experience of it in the adult. Until many further developments in the steps of this proceeding, and it has been shown by experience in how many cases a recurrence of the disease takes place, many surgeons will keep to the time-honored and classic lateral section, for the performance of which a well-defined route has been indicated leading to the bladder, for the following of which only a thorough knowledge of the anatomy of the region, with the power to act boldly, precisely, and carefully are required.

The complications which follow the various operations are commensurate to the length of time required for convalescence. The dangers of litholapaxy occur mainly during the operation, e.g., wounding of the bladder-wall, or injuring the urethra, they are to be avoided by care in the carrying out of the various steps in its performance. The dangers of the cutting operations are those of all open wounds, increased by the presence of the urine as a fluid passing over the raw surfaces. A tabulated comparison of the chief troubles that may be expected to occur after removing a stone, will serve to show that, the manipulations being carried out with care and preciseness, the least severe and trying sequelæ may be expected to follow the crushing operation, while the most severe may be looked for after the high method.

The chief sequelæ are :—

In Litholapaxy.	In Perineal Lithotomy.	In Supra-pubic Lithotomy.
1. Rigors	1. Rigors	1. Rigors
2. Cystitis	2. Cystitis	2. Cystitis
3. Epididymidis	3. Septicæmia	3. Peritonitis
	4. Epididymidis	4. Cellulitis
	5. Infiltration of urine	5. Sloughing
	6. Suppression of urine and uræmia	6. Extravasation
	7. Nocturnal Incontinence	7. Posterior Hemorrhage
	8. Impotence	8. Suppression of urine and uræmia
	9. Hæmorrhage	9. Urinary fistula
		10. Septicæmia

I wish to refer briefly to only one of these, viz., that of impotence, which has been given some attention of late, and upon which there is a considerable difference of opinion. In this relation definite information has been obtained from the first of my own cases. Three years after the performance of the operation, I made enquiries of the man and he said, "The operation has made no difference that I notice, further than that the seminal fluid does not appear to be ejected with so much force." His wife has had a child since. This is of great importance in regard to lithotomy in male children, and books upon the subject contain but scant reference to it. It is incidentally referred to by Surgeon-Major Keegan in the *Lancet* of December 18th, 1886. There he simply says that he has had the subject under consideration, and he would make investigations in regard to it during his further residence in India. In a later article in the *B.M.J.*, he says, "I do not think that surgeons practising in India generally share Langenbeck's opinion that the operation of lateral lithotomy in boys is

frequently followed by emasculation; the natives of India have certainly not generally noticed this as an after consequence of the operation, and should they ever come to do so, they will at once abandon this time-honored operation for litholapaxy and supra-pubic cystotomy."

Sir. Wm. McCormac in the *Lancet* of March 19th, 1887, in a paper advocating supra-pubic lithotomy states a point in favor of the operation, "Nor can sexual impotence happen," and he quotes from two Russian professors, neither of whom believes in the occurrence of impotence as a result of the lateral operation. Mr. Farrant Fry, of Swansea, in making some remarks on a case of suprapubic cystotomy in the *B.M.J.*, June, 1888, says, "How frequently men who have been cut for stone during childhood would appear to be sterile. Mr. Teevan brought four cases of childless husbands before the Clinical Society, and the only three men I know who underwent perineal lithotomy during childhood are married but childless." Mr. Golding Bird, discussing the subject of supra-pubic and perineal lithotomy in the *B.M.J.*, March, 1887, doubts that even if the ejaculatory ducts be injured during the operation any permanent lesion, physiological or anatomical, results; he quotes from Mr. Cocks, who, having performed two hundred cases, never knew of any injury in this direction, and he remembers Sir Astley Cooper to make a similar statement, one case only excepted. "Injury of the duct with occlusion during cicatrisation would certainly be followed by gland atrophy, and this is not a sequel of lateral lithotomy."

Atrophy of the testicles has not been noted as a sequel of the operation; had it been, particular notice would have been taken of it.

My first case supports those who say that impotence does not follow the lateral operation, the weight of obtainable evidence would seem to favor this view, and one would, on *a priori* grounds, expect that with unaltered testicles the seminal fluid would still have a free passage to the urethra, and its composition would be the same as if no injury to the channel had ever taken place. In T.G. epididymidis had occurred upon each side more than once, and yet his powers in this direction were little altered.

Indian surgeons should be able, in a few years, to settle the matter definitely by making investigations pertaining to it. The numbers of cases that come under their notice are so great that their conclusions would be of great value and would carry much weight.

In a subsequent article I shall have something to say about the distribution, and frequency of occurrence, of calculus in the bladder, as a disease in Australia.

**NOTE ON A CASE OF HYDROCELE WITH MILK-LIKE CONTENTS.**

READ BEFORE THE SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

By E. C. STIRLING, M.D., F.R.C.S., SURGEON TO THE ADELAIDE HOSPITAL, AND LECTURER ON PHYSIOLOGY IN THE MEDICAL SCHOOL, ADELAIDE.

GEORGE STRANGWAYS PUNCH, aged 9, an aboriginal boy, came under my care at the Adelaide Hospital on March 24 of the present year, at the instance of Mr. Melville Jay, to whom I express my thanks for the opportunity of seeing a case of considerable rarity. The history was that of an ordinary hydrocele of the tunica vaginalis, and on being tapped by Mr. Jay some milk-white fluid was drawn off, of which he sent me two fluid ounces, which I believe was the total amount obtained. Both on inspection and microscopic examination of the fluid it presented an appearance very similar to that of ordinary cows' milk. There was no sign of spermatozoa.

Chemical examination of the fluid for which I am indebted to Mr. Turner, assistant in the chemical laboratory of the University, revealed the following features:—Sp. Gr. 1017. Reaction alkaline. Marked reaction of sulphuretted hydrogen with lead acetate. On evaporation, the solid matter was nearly all dissolved by ether, and on evaporation of the etherial extract there was a yellow residue of fat which saponified readily with potassium hydrate. The solid matter which was not soluble in ether gave the ordinary proteid reactions.

The result of these examinations was thus to establish the milk-like character of the fluid from which, however, it differed in the Sp. Gr. (that of milk being on the average 1030), and in some minor details, as in respect of the average size of the fat globules.

On searching the scanty literature unfortunately available for our use, I can only find a reference to three similar cases, though I doubt not there are others on record. Two of these are stated to be reported by M. Vidal in his work on surgery to which I am unable to refer, and the third occurred in the practice of Mr., afterwards Sir William, Fergusson, who states that he had never previously met with a similar case. The examination of the fluid in this instance was conducted by Dr. George Harley and Mr. Francis Mason, and their report appears in Vol. xvi. of the "Transactions of the Pathological Society." From this it is evident that in their case and in my own the characters of the fluid were identical. These gentlemen suggest the name Galactocoele as appropriate for such cases,

but with a remarkable forbearance, which one might wish to see imitated more often in the present day, they abstain from recommending the adoption of a new term.

After this boy came under my care, concurrently with the slow refilling of the tunica vaginalis he soon began to develop a pleurisy, for which he was transferred to the medical wards under the care of Dr. Verco. On March 30th, six days after admission to the hospital, Dr. Verco withdrew some of the fluid from the swelling with a hypodermic syringe, and the following is the substance of his notes as to its characters:

"Fluid milky white, with a tinge of green resembling pus. Under the microscope no free globules or granules of fat are to be seen, but there are numerous corpuscles exactly like those of pus, together with other and fewer large corpuscles in a state of fatty degeneration, which look like aggregated fat molecules."

After recovery from the pleurisy, both tunicae vaginales—the other having become affected—were incised by Mr. Jay in my absence, and the boy was discharged as cured on the 12th June.

On the 29th September he was re-admitted, under Dr. Verco, with interesting but serious cerebral symptoms.

Into these I do not enter, as I bring forward the case only in respect of the unusual characters of the fluid of his hydrocele, which, like that of the case reported in the "Transactions of the Pathological Society," seems to be that of ordinary hydrocele, plus a marked amount of fat. For such admixture I am quite unable to suggest any origin or cause. In conclusion, I might mention that the boy's blood was examined for filaria both by day and by night, but with negative results.

**ANEURISM BY ANASTOMOSIS, INVOLVING THE OCCIPITAL, POSTERIOR AURICULAR AND TEMPORAL ARTERIES.**

By ALEXANDER MACCORMICK, M.D. EDIN., M.R.C.S. ENG., HONORARY ASSISTANT SURGEON PRINCE ALFRED HOSPITAL, SYDNEY.

P.T., æt. 27, a groom, a native of Roxburghshire, Scotland, was admitted into the Prince Alfred Hospital, Sydney, on August 4, 1885.

The history of the case is as follows:—

Patient is a man about the average height, well nourished, and enjoying good health. He has had no previous illnesses except those incident to childhood.

When he was about ten (10) years of age he noticed what he describes as a small "pimple"

on the back of the right ear. He applied for advice, and had it rubbed over with lunar caustic. From this time it began to grow steadily, and at intervals he suffered from smart attacks of bleeding, which he generally succeeded in stopping with cobweb. About six (6) years ago he went to the Edinburgh Royal Infirmary, and was admitted into that institution. There he was treated at six sittings with galvano-puncture. After the last sitting there was a good deal of suppuration. He was discharged much improved, but still with a tumour of some considerable size. From that time to the present he suffered from occasional attacks of severe hæmorrhage; moving his head on the pillow during sleep, or a careless rub with the towel when drying himself, being sufficient on many occasions to start it.



On admission he was found to be suffering from a large aneurism by anastomosis, involving the whole surface of the right auricle, extending backwards over the mastoid process towards the occiput and upwards along the course of the temporal artery. A large part of the scalp above and behind the ear could be felt as if floating over the dilated vessels. There was a pulsation visible when standing at a considerable distance off, and the patient himself was conscious of a rushing sound in the ear. Pressure on the common carotid artery of the same side immediately caused the pulsation to cease and the tumour to become visibly smaller. On the surface of the auricle was a scab surrounding a hare-lip pin, which was inserted to temporarily stop a sharp attack of hæmorrhage which took

place shortly before admission. There was no solidification in any part.

As total extirpation with the knife was out of the question, I decided to aim at consolidation of the aneurism by means of galvano-puncture; but as I anticipated that some suppuration might follow, I thought it advisable to tie the common carotid on the same side, so as to lessen the risk of hæmorrhage, and favour solidification.

On August 12 I tied the common carotid artery immediately above the anterior belly of the omohyoid muscle. The pulsation in the tumour immediately ceased, and the wound healed by first intention. After the operation he got a severe attack of eczema on the same side of the neck and face, due to the use of iodoform.

On August 30 indistinct pulsation was communicated to the aneurism through the occipital artery. The part of the tumour behind the ear was subjected to electrolysis under chloroform. The sitting lasted half an hour. Twenty-four small Daniell's cells were used. This led to solidification of part of the aneurism, and was followed by no suppuration.

On September 11, under chloroform, the part of the tumour covering the auricle was treated in the same way. This was followed by a considerable amount of suppuration and some sloughing. The sloughs separated and healing took place without any serious hæmorrhage, and patient was discharged much improved.

January 23, 1886. Re-admitted for further treatment. Galvano-puncture was again tried at those points where there was still no consolidation; and on this occasion it was followed by a good deal of suppuration and cellulitis, which caused the tumour to become solid with the exception of that part of it which covered the auricle. On account of the irregularity of the surface of the auricle, that part of the aneurism covering it could not be treated by galvano-puncture successfully, and it was also noticed that increase in growth always took place from this point.

March 7.—The auricle was carefully clamped and then removed by means of the actual cautery, at a dull red heat. There was no hæmorrhage, the eschar left in due time dropped off, the ear granulated over quickly, and patient was discharged.

He reported himself two years after and at that time there was no return. One or two venous channels could be felt over the mastoid process, but there was no pulsation.

NOTE.—In a similar case in future I should prefer to tie both the external carotids in preference to the common carotid. This procedure would be the best to diminish the blood supply



to the scalp; its circulation would then be carried on through three main channels:—

1. Supra orbital and frontal arteries.
2. Anastomosis of occipital, with the muscular branches of the vertebral, and with the deep cervical.
3. Anastomosis between the superior and the inferior thyroid arteries.

## ON THE PATHOLOGY AND CURE OF SNAKE-BITE.

By AUGUSTUS MUELLER, M.D., YACKANDANDAH, VICTORIA.

### I.

ALTHOUGH this article is not intended to add anything fresh to the views on the above subject, as expressed in an essay read before the Medical Society of Victoria on the 2nd of May last, and further elaborated in a brochure published by me since, the desire to make converts to these views in the *Gazette's* more extensive circle of readers must be my excuse for again submitting them here. That in proportion to the number of these converts increasing, the number of valuable lives we are annually losing through snake-bite will decrease, is not an empty boast, but an assertion founded on firm, conscientious conviction, which, I am certain, time will verify.

To most readers no doubt the question will suggest itself at the outset,—how comes an obscure country practitioner to elaborate a theory of the action of snake poison that has not suggested itself to any of the more famous labourers before him in this field of research? In answer to this question I may be permitted to state, that I had a very narrow escape from death by snake-bite at the very commencement of my Australian career, and that this powerful *argumentum ad hominem* has been the incentive to a keener observation of the phenomena of snake poisoning than they would otherwise have received at my hands and probably receive at the hands of most practitioners. For this observation a practice of 30 years in a large, well-watered, snake-infested mountainous district, a life, so to say, among snakes, has given me unusual facilities. Without making a single one of those experiments, the utter barrenness of which in results would have been alone sufficient to deter me from making them, I have been able to observe the effects of the subtle poison frequently on the domestic animals, whilst many of the numerous cases of snake-bite that presented themselves in my practice were both typical and highly instructive.

Still, with all these facilities thrown in my way,

it would have been strange indeed if my theory of snake poison as a specific nerve poison had been quite new. For the purpose of ascertaining whether it was or not, I therefore, during the few days I spent in our gay metropolis previous to reading my paper, searched carefully in the public library for any records on the subject, and I was highly pleased to find in the *Proc. of the Roy. Soc.*, 1881, vol. xxxii, page 333, a paper by A. F. Wall, M.D., expressing views very similar to my own. Wall, however, does not specify the motor and vaso-motor nerve centres as the organs specially affected by the poison, and the use of strychnine as an antidote in its well-known exciting action on these centres, therefore, did not occur to him. He extends the depressing effect of the poison over the sensory as well as motor centres of the cerebro-spinal system. Sir J. Fayrer and Dr. Lauder Brunton, in confining the action of the poison to the terminations of the motor nerves, were still further from solving the problem, but all three observers coincide with me, that is on the nerve tissue, and not on the blood, the snake poison works those subtle effects, which result in partial, and in fatal cases in complete, suspension of nerve function. Wall, in extending these effects over the whole of the cerebro-spinal system, though overstepping the mark, is nearest to it by assuming the origin of the depressed nerve action to be central; whilst Fayrer and Brunton correctly single out the motor system, but erroneously, I think, assume only the terminations of the motor nerves to be affected.

Though somewhat anticipating the order of this treatise, I may here state that complete paralysis of motor nerve-ends, apparently caused by direct contact with the poison, and not proceeding from a central cause, results from the bite of those species of snakes that cause swelling and effusion of blood around the bite and in its track, more or less upwards, the viperina especially. This paralysis, however, is confined to the ends of the vaso-motor nerves, and shows itself in a complete removal of that tension in the capillary vessels which is a *conditio sine qua non*, of a healthy capillary circulation. In the normal state the finest and last ramifications of the capillaries still carrying arterial blood allow the blood corpuscles to pass through them in single file only, and we may even assume that for the purposes of endosmosis and exosmosis, of a proper interchange of material between these living and life-giving cells and the tissues through which they pass in their rapid course, an intimate contact with the capillary membrane, even a gentle friction between the two is required. Now let us imagine the healthy tension of the capillary membrane, which is entirely due to

nerve action, and alone renders the above conditions possible, to be removed by the relaxing, paralyzing effect of the snake poison. What is likely to be the result? The capillary tube, no longer able to resist the blood pressure, becomes distended, its lumen larger than the diameter of the corpuscles that now press into it in double and triple file, becoming wedged against each other, and finally blocking the passage. The distended membrane forming the capillary tube at first only allows the blood serum to ooze out, but at last gives way and allows the blood to flow freely into the tissues. The corpuscles, on their part, diseased already by want of oxygenation, the result of a similar, though less intense derangement in the capillaries of the lungs, finally break up to a great extent. Hence the dark, fluid condition of the blood. There is one species of the viper class, the *Dubois Russellii*, of India, that causes extravasations of blood beyond the bitten limb in all parts of the body, more especially the mucous membrane of the intestines, from which latter copious hæmorrhages into bowels and bladder result. For these the above theory also furnishes a ready explanation. I shall recur to it again when treating of the general blood changes produced by snake poison, but must now invite the reader's attention to a consideration of the general symptoms accompanying snake-bite, with a view of showing conclusively that every one of these symptoms results from an affection of certain nerve cells, the nature of which it will be my first task to explain.

The cells composing the grey substance of the nerve centres may not inappropriately be compared with so many telegraph offices, since the force they create and discharge, the so-called nerve force, is not unlike electricity, and probably a higher form of it. In one set of these offices, the sensory cells, messages are received from the outer world, impressions made on the senses, and either registered as ideas or transmitted at once to the other set of offices, the so-called motor cells. From these there is a constant despatch of messages sent forth into the body, acting on the voluntary and involuntary muscles and every contractile fibre, regulating and controlling the important processes of circulation, digestion, assimilation, etc., as well as the equally important ones of volition and thought. Now it is to these offices that the snake poison on being introduced into the body at once wends its way, and immediately after admittance commences to interfere with the important business carried on there. Of the nature and degree of this interference we are able to judge by the effects, which are quickly manifested. It does

not turn off the batteries at once and completely arrest the currents of nerve force, for that would result in instant death; but gradually, slowly, and surely it reduces the volume and force of these currents, and left to its own fatal devices, finally reduces them to a degree incompatible with life. This is the key to the mystery of snake-bite that has hitherto baffled us. How the key fits, how it has enabled me by the method of strict induction not only to reduce the puzzling phenomena accompanying snake poisoning to the operation of one law that explains them all, but also to devise an antidote, counteracting the poison with unerring certainty, in the human organism at least, I will endeavour to show in my next contribution to these pages.

### A CASE OF FOREIGN BODY IN THE LARYNX.

READ BEFORE THE SOUTH AUSTRALIAN BRANCH,  
B.M.A.

BY JOSEPH COOKSON, M.B., RESIDENT SURGEON,  
CHILDREN'S HOSPITAL, ADELAIDE.

I SHOULD like to draw your attention for a few moments to the case of a child that was admitted into the Children's Hospital on the 11th of August of the present year, under the care of Dr. Verco, who has kindly allowed me to read these few notes.

The following was the history obtained:— Mary Cronin, æt. 14 months, of Balaklava, was, according to the mother, perfectly well up to the morning of the 4th August. She did not take her food as well as was her custom that morning, but otherwise was quite as usual. Whilst being fed by a young sister the same day with boiled egg and bread crumb, she began to choke. The mother patted her on the back, which was followed by vomiting; ever since has had croupy cough, hoarse voice, with difficulty of breathing, but no struggling for breath. The mother states that she prepared the food herself, and that there were no crusts nor foreign body of any description in the food.

On the 10th she was brought to Adelaide to Dr. Hamilton, who sent her to the hospital.

On admission the temp. is 92.2°. There is hoarse voice, almost aphonic, and croupy cough, dyspnoea and sinking in of the supra-sternal notch during inspiration; *alæ nasi* working; no cyanosis; no paroxysmal dyspnoea, nor has she ever had any. Does not take food very well, and sleeps for short intervals only when nursed.

On inspection of the throat no patches of membrane can be seen. To have warm foment.

12-8-88.—Temp. this morning, 99.4°. Increased dyspnoea, but no paroxysms. Nothing abnormal at the back of throat. Dr. Verco has seen her and ordered a mixture containing chlorate of potash, syrup squills, and liq. ammonia acetatis. Poultices to be substituted for foment.

13-8-88.—Temp. last night was 100.2°; 100° this morning. Difficulty of breathing was so great last night that I thought of doing tracheotomy.

14-8-88.—Temp. last night, 99.4°; 99.6° this morning. Breathing a little easier.

15-8-88.—Much better to-day. Cough is loose, and voice less croupy. Temp., 98.4°.

16-8-88.—This morning, after a slight cough, the mother noticed a piece of egg-shell in the mouth. Quite easy now. Temp. still normal. Cough still croupy, but voice quite altered; now clear, nearly natural. This is the thirteenth day of her illness.

19-8-88.—Has rapidly improved. Went home to-day. Voice slightly croupy; otherwise quite well.

*Remarks.*—You will see by the history of the case that it presents a marked difference from what is generally taught and described in text-books. The presence of attacks of paroxysmal dyspnoea is essentially the symptom upon which stress is laid in diagnosis of foreign body in the larynx, and this was entirely absent in the case mentioned. Owen, in his small work on "Surgical Diseases of Children," says: "If it lodges in the larynx spasmodic coughing is at once set up, and this may have the effect of causing its expulsion. The spasm is due to peripheral irritation of sensory nerve filaments; but at periods the respiration is perfectly easy. If the body remain, the coughing continues, and inflammation attacks the mucous membrane, respiration becomes difficult and insufficient, the dyspnoea is paroxysmal, and the child clutches at its throat and stuffs his fingers into his mouth. The voice is altered, and the face becomes red and dusky; the veins swell up, perspiration is profuse, and exhaustion advances."

There are a few points I should like to lay particular stress on, and of these I may mention as a beginning:

*The Mother's Evidence.*—As a rule sufficient attention is not paid to the testimony of parents or friends, and this case was no exception to the rule.

If the mother's testimony had been taken *in toto* there would have been no need to go any further for diagnosis, but the fact of the child

not taking its food so well that morning and the absence of paroxysms was taken to point to something else.

*In regard to Diagnosis.*—Omitting the history of onset there was nothing from the symptoms to show the presence of a foreign body. The absence of membrane from the back of the throat does not prove its absence from the larynx, the dyspnoea, croupy voice and cough, sinking in of the supra-sternal notch during inspiration might just as well have been referred to membranous laryngitis.

The elevation of temperature again was in favour of croup and opposed to a foreign body.

The use of the laryngoscope in skilled hands is recommended as an aid to diagnosis, but it must necessarily have been very difficult to use in this infant.

Owen says: "The laryngoscope affords no practical information. The child resents the introduction of the mirror and if with the help of chloroform an inspection be made, nothing probably is seen but swollen tissues and frothy mucus."

An examination of the urine for albumen was proposed but it was impossible to obtain any. Its presence of course would have lent valuable aid.

Another point worth observing is that the child improved for two days before the shell was found in the mouth, apparently it must have been detached from its old position and may afterwards have been caught in the mouth where it remained till noticed by the mother.

*As regards Treatment.*—A foreign body in the larynx places the patient in great danger owing to likelihood of death by spasm or subsequently from oedema, death in children being more common from spasm of the glottis than from mechanical obstruction.—(Bryant).

Given the presence of a foreign body, it must be at once removed. Some authorities recommend tracheotomy at once before making an examination, others make the examination first, having everything ready for tracheotomy should it be needed; the former seems the safer plan. If after the operation the body cannot be removed thyrotomy must be performed as well.

This seems to me everything worthy of mention in this particular case. Briefly summarised it shows that a foreign body lodged in the larynx for 12 days, giving rise to symptoms exactly resembling true croup, without the particular symptoms of a foreign body (paroxysmal dyspnoea with intervals of quiet), the diagnosis resting entirely on the mother's evidence, to which sufficient weight was not given as is too frequently the case.

## NOTES ON EAR PRACTICE.

READ BEFORE THE SOUTH AUSTRALIAN BRANCH  
OF THE BRITISH MEDICAL ASSOCIATION.

BY W. ANSTEY GILES, M.B., ETC., LECTURER ON  
AURAL SURGERY, ADELAIDE UNIVERSITY, AND  
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HOSPITAL.

MASTOID CARIES arising during the course of chronic suppurative inflammation of the middle ear is by no means uncommon, but we rarely meet with suppuration and caries occurring in the mastoid cells, as the result of acute otitis media, without perforation of the tympanic membrane. If the patient comes under medical treatment early enough a timely incision in the membrana tympani, giving free exit to pent up pus, will doubtless usually prevent further complications, but unfortunately, in very many instances, the incision that would give relief is not made, and as a rule the matter bursts through the drum-head to the intense satisfaction of the individual, who now obtains freedom from severe pain.

Occasionally, however, instead of finding its way out of the tympanic cavity in the manner thus indicated, the purulent collection escapes into the antrum mastoideum, occasioning suppuration in the mastoid cells, with other changes, ending in caries of the bone and perforation either into the cranial cavity or externally.

The case I wish to bring under your notice this evening is a good instance of the latter cycle of events, and the notes may be of interest to some members of this Society.

M. S., æt. 8, female, consulted Dr. Gardner on the 14th September last, and he very kindly handed her over to me for treatment. The patient complained of great pain in the right ear, almost complete deafness on the same side, and a considerable swelling behind the auricle.

*History.*—She had not suffered from scarlet fever or measles. Has always been liable to sore throat and catches cold easily. Does not remember ever receiving a blow or any injury to the ear. Her mother was quite positive that the child had never had any otorrhœa. The hearing had been somewhat impaired for about two years, and always when she takes cold she becomes very deaf. Latey she has been troubled with severe tinnitus in the right ear. About three weeks ago (about the 24th August), she caught cold, and most intense pain arose in the ear under consideration. Various popular remedies were tried, but no medical aid was called in. She was feverish, but no delirium or head symptoms were noticed. About a week before I saw her the side of her head began to swell and her eyelids got puffy.

*Condition when I first saw her on the 14th September.*—There was a large collection of fluid behind the right auricle, which extended forwards to the frontal bone, backwards to the occipital protuberance, while in an upward direction it reached the cranial vault. The right eye was completely closed on account of swelling of the eyelids; the left eyelids were also swollen, but not to the same extent. She was quite deaf in the affected ear. As the pain and fear of manipulation were great, I did not attempt to examine the deeper parts with mirror and speculum. She had well marked chronic pharyngitis, no enlarged tonsils, nor post-nasal vegetations. The nose was healthy. The abscess did not point at any particular spot. The child presented no distinct evidence of any constitutional taint. I at once made an incision behind the ear, and evacuated a large quantity of foetid pus. On putting my finger into the wound I came upon dead bone.

The next morning, Dr. Gardner assisting me, the child was put under ether, and the incision, which I had purposely made as close as possible behind the auricle the day before, was enlarged to the extent of about two inches. I then could discover an opening in the outer shell of bone at the antero-superior part of the mastoid process, the spot where, in children, matter shut up in the mastoid cells most usually comes to the surface. The reason for this being that here the outer wall of the mastoid antrum is thinnest and the presence of the squamo-mastoid suture facilitates perforation in this situation. The bone around the opening was quite soft, so with a gouge I was able to enlarge it without difficulty. I removed all dead bone very completely, and got an opening in the outer shell of the mastoid process large enough to admit the tip of my little finger. All debris and granulations tissue were scraped away with a sharp spoon, after which the cavity was washed out thoroughly with a dilute carbolic solution; a drainage tube was inserted.

After the operation the child experienced the greatest relief and comfort, the discharge rapidly diminished in quantity, the hearing was considerably improved, the swelling of the eyelids three days after had absolutely disappeared and an exceedingly rapid recovery took place. I examined the membrana tympani two days after the operation and found it presented a dull greyish-red lustreless appearance, but no sign whatever of either a perforation or a cicatrix. When the patient last came to me (20th inst.), she was in excellent health and spirits and only a small superficial granulating wound remained. The tympanic membrane had regained its normal lustre. I might have incised the membrane at the same

I operated on the bone with the view of washing out the tympanic cavity through the external auditory canal, but the complete drainage obtained through the posterior opening answered all requirements and brought about the extremely satisfactory result I now record.

The *British Medical Journal* for the 1st September, contains a paper read before the British Medical Association, in Glasgow, by Mr. Lewis, of Birmingham, on a case somewhat analogous to mine, the principal difference being that the spontaneous perforation took place at the apex of the mastoid process, and the pus burrowing downwards set up extensive cellulitis of the neck.

The principal points of interest in the case I have narrated are :—

1. Acute suppurative inflammation of the middle ear occurring without perforation of the tympanic membrane, causing a rapid caries in the mastoid cells.

2. The extreme rapidity with which all bad symptoms disappeared after the operation.

3. The extraordinary apathy exhibited by the parents in not seeking medical advice earlier.

## PROCEEDINGS OF SOCIETIES.

### NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 75th general meeting was held in the Royal Society's Room, Sydney, on Friday, 5th October, 1888. Present :—Dr. Chambers, President (in the chair); Drs. Fiaschi, Quaife, Knaggs, Crago, Parker, Hankins, Kendall, Lyden, W. W. J. O'Reilly, Martin, Breneman, Scot-Skirving, Worrall, Brady, Roth, West, Todd, and Jenkins.

A letter from Mrs. Marshall, acknowledging the letter of condolence, was read.

DR. QUAIFFE explained a case of syphilitic perioritis, and exhibited the patient.

#### ANTIPYRETICS.

DR. KENDALL read a paper on antipyretics.

DR. CRAGO said he was very much interested in Dr. Kendall's paper. Dr. Cayley always used cold baths in typhoid, sometimes bathing as much as four or five times a day. Since the discussion on antipyretics at the Royal Society Section, he (Dr. Crago) had used anti-febrine and had been very much struck with the result in bringing down the temperature. In all cases of feverish symptoms he (Dr. Crago) used wet packs with very good results.

DR. JENKINS said, in the discussion referred to, some of the gentlemen present at that meeting thought that cold baths were of no use. Dr. Colley deprecates the use of the cold bath.

MR. HANKINS said he remembered a case of typhoid in which the temperature went up to 107°; wet packs were used and immediately the temperature came down to 100°. He (Mr. Hankins) attributed the recovery of the patient to the wet packs.

DR. KNAGGS said he remembered a case in which the temperature was as high as 106° and after using

the wet pack for half-an-hour the temperature was reduced by three points.

DR. SCOT SKIRVING said he had always believed in some form of cold or tepid application as an antipyretic. Cayley and Copeland's reasons in favour of this had swayed him theoretically, and practically his good opinion had been further confirmed. As to chemical antipyretics, his experience had not been so satisfactory. It seemed to him that such drugs were most useful in emergencies where the pyrexia itself, from its intensity, was fraught with danger, and where the nature of the disease did not, as in typhoid, make a speedy exacerbation probable after the drug had lowered the temperature. Perhaps a larger experience would lead him to like them better. In the meantime he found their good effects evanescent, and not without many grave disadvantages.

DR. CHAMBERS said he had very few cases of typhoid; but very often came into contact with cases of high temperature. As touching cold bathing, he (Dr. Chambers) does not always rely upon cold baths, but very often mixes vinegar and water, which is very refreshing to the patient and always has a good effect. As regards alcohol in cases of high temperature, it is not so good unless there is a good deal of exhaustion. Drugs are not so useful as either bathing or alcohol.

DR. QUAIFFE said, as to chemicals in cases of high temperature he had not had much experience; but thought that sponging and alcohol were very valuable, especially alcohol in cases of extreme exhaustion.

DR. KENDALL thanked the members for their criticism, and was glad that such an interesting discussion had taken place.

#### ADMINISTRATION OF ANÆSTHETICS.

DR. KNAGGS moved—"That, in the opinion of this meeting, it is advisable to form a Committee to formulate suggestions with reference to the administration of anæsthetics, the Committee to consist of Dr. Shewen, Dr. Murray Oram, Professor Anderson Stuart, Dr. Scot-Skirving, Dr. A. Watson Munro, Dr. Fisher, Dr. Clarke, Dr. Kendall, Dr. Muskett, Sir Alfred Roberts, Dr. Chisholm, Dr. Quaife, Dr. P. Sydney Jones, Dr. W. W. J. O'Reilly, and the mover, with power to add to their number." Seconded by MR. HANKINS and carried.

DR. KNAGGS brought under the notice of the members the case of the late Dr. Martin Browne, whose widow had been left destitute.

### SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY MEETING, held at the Adelaide Hospital, Thursday, October 25, 1888.

Present—The President (Dr. Stirling) in the chair; Drs. Verco, W. A. Giles, Gardner, Watson, Jay, Symons, Cawley, W. Robertson, Cleland, Finnis, Cookson, Stewart, A. Wigg, Swift, Gault, Lendon, and the Hon. Sec. (Dr. Poulton).

The minutes of the previous meeting were read and confirmed.

DR. VERCO showed the skull of an aboriginal native presenting an exostosis at the entrance of each auditory meatus, and a cavity in the lower jaw the result of alveolar abscess.

PROFESSOR WATSON exhibited a skull showing a depressed fracture, the result of a homicidal blow, and a stomach presenting ring scirrhus of the pylorus.

DR. GARDNER read a paper on Nephrectomy.

DR. COOKSON read a paper on a case of Foreign Body in the Larynx. (See page 42.)

DR. VERCO said he diagnosed the case as one of ordinary croup, which it resembled closely in every particular.

DR. SWIFT asked if it had been noted whether there was evidence of greater obstruction in one lung, or part of one lung. He thought the foreign body must have lodged low down in a main bronchus. He mentioned the case of a child aged three (3) years which came under his care at the Great Ormond-street Hospital some time ago, where a piece of nutshell was ejected from the larynx fifty-two (52) days after its entrance, and a month after tracheotomy had been performed.\*

DR. VERCO said he had not found anything pointing to special involvement of any particular part of either lung.

DR. W. ANSTAY GILES read some notes on Ear Practice. (See page 44.)

DR. STIRLING read notes on a case of Hydrocele, with milk-like contents. (See page 39.)

DR. VERCO mentioned that the boy was now under his care in the hospital with symptoms of brain abscess.

DR. LENDON related a similar case he observed in the Bristol Infirmary.

THE PRESIDENT said he wished to draw the attention of members to the approaching Medical Congress in Melbourne. He hoped that all members of the branch would enrol their names, and reminded the meeting that the Congress in Adelaide initiated by the South Australian Branch, was largely supported by the profession in the other Colonies. He expected to see South Australia well represented on the members' roll and at the meetings. It was desirable that intending members should give in their names and subscriptions without delay, and this could be done through the local secretary, Dr. Poulton.

#### MEDICAL SECTION OF THE ROYAL SOCIETY OF NEW SOUTH WALES.

MONTHLY meeting held on September 19th, 1888; Dr. Sydney Jones in the chair. Members present—Drs. MacCulloch, Crago, Chisholm, Quaife, Roth, Lyden, Goode, MacAllister, Fiaschi, MacCormick.

DR. SNEWEN read notes of two cases of disease of the lung. About the first there was some doubt as to the diagnosis. Dr. Shewen believed it to be a case of chronic pneumonia; the solidification breaking down into a cavity of a non-tubercular nature, which became distended with pus. The second case was one of gangrene of the lung. Both patients were operated on by Mr. Hankins. Both made excellent recoveries and were exhibited for inspection.

DR. GOODE congratulated Dr. Shewen on his cases. It showed what could be done by operation when accurate diagnosis were made. Dr. Crago had seen the first patient, and was convinced the operation saved the man's life. Dr. Sydney Jones agreed this case could not have been only gangrene of the lung—more likely a case of hydatid with suppurative in the cyst. His experience in old days was that gangrene of the lung was always fatal.

DR. QUAIFFE showed a polypus he had removed from the posterior edge of the nasal septum, by the snare; also a laryngeal growth, removed from just above the true vocal cords, of a sarcomatous nature.

DR. GOODE read notes of a case of osteo-sarcoma of the leg, and a case of secondary epitheliomatous deposits in the axilla.

Meeting of the Medical Section of the Royal Society, held on October 18, 1888; Mr. G. T. Hankins in the chair. Present—Drs. Sydney Jones, Crago, Goode, Fiaschi, Eichler, Deck, Worrall, MacCormick, Jenkins, McCulloch, West, Foreman, Wright, MacLaurin, Faithfull, Brady, Roth, and Chambers.

DR. WORRALL read a paper on "Cases in which labour had been induced." In the first there was a large fibroid in Douglass' Pouch, blocking up the cavity of the pelvis. It could not be pushed out of the way, and the woman would not consent to its removal. A soft French bougie was passed into uterine cavity. The os uteri was high up and hard to find. The placenta was attached to lower uterine zone. There was much hæmorrhage, and craniotomy had to be performed. The patient recovered. In the second case labour was induced for uræmic convulsions associated with facial paralysis. The urine contained much albumen. This patient also recovered, but died two months afterwards from the effects of a chill.

DR. GOODE agreed with Dr. Worrall that in the first case it would have been advisable to remove the fibroid tumour. He gave an account of a patient under his care with albuminuria during pregnancy.

MR. FOREMAN agreed with Dr. Worrall's treatment, but he would not as a rule induce labour on account of anasarca and albuminuria.

DR. SYDNEY JONES thought that in the first case the fibroid might have been removed by abdominal section. He would not induce labour in all cases of anasarca, but would treat in the usual way, dry cupping, etc. Chloral hydrate was of great value in uræmic convulsions.

DRS. CRAGO and HANKINS made a few remarks as to the use of pilocarpin and chloral hydrate.

DR. WORRALL replied. He looked upon pilocarpin as a dangerous remedy.

DR. JENKINS read a paper on "Splenic Leucocytæmia" occurring in a woman aged 46. The spleen was enormously enlarged, and the white blood cells greatly increased in number. Had only complained of discomfort for two years; shortness of breath, and languor. Towards the end she had total loss of sight in the left eye, and partial loss in the right, due to hæmorrhages—hæmoptysis—and total deafness; and eventually died of hæmorrhage from rupture of swelling due to effusion of blood in right ischio-rectal fossa.

MR. HANKINS thought it would be interesting to discuss when operation should be performed, if ever, in these cases.

DR. SYDNEY JONES thought operation was out of the question. He would like to know whether any of the members had ever tried hydrofluoric acid in splenic enlargement?

DR. CHAMBERS gave an account of a case in which he had removed an enormous spleen merely on account of the mechanical discomfort caused. There was no hæmorrhage at the time of operation.

DR. JENKINS, in reply, stated that removal of the spleen in an undoubted case of leucocytæmia was an unjustifiable operation.

DR. CHAMBERS referred to a case he had previously shown of a fibroid uterus, and now exhibited the photograph of the patient, who had made a perfect recovery after the operation. Dr. Chambers went very freely into the vexed question of "treatment of fibroids," referring especially to Apostoli's electrical treatment, which, as far as he could judge, was of little or no use in certain cases; and he referred to a case that had lately come into his hands of a woman who had had continuous applications of electricity at Prince Alfred

\* Dr. Swift's notes in detail of this interesting case will be published in next month's issue of the *A.M.G.*

Hospital without the slightest effect. He had since removed the growth, and the patient was perfectly well.

MR. FOREMAN stated that so far his results with Apostoli's method were not encouraging. Before the "menopause" fibroids often gave great trouble. After it as a rule the trouble ceased.

DR. SYDNEY JONES believed pure medical treatment often was most beneficial. Judicious dieting—no butchers' meat, and no stimulants should be allowed, and the saline purgatives should be employed. He also had great faith in ergotine.

DR. WORRALL also believed in the continued use of ergotine.

The meeting ended at 10.15.

### PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners by the respective Boards:—

#### NEW SOUTH WALES.

Edwards, Charles Augustus, L.R.C.P. Edin., 1886; L.S.A. Lond., 1883; L.R.C.S. Edin., 1886.

Knott, Thomas Henry, L.S.A. Lond., 1864; M.R.C.S. Eng., 1864.

May, Arthur William, L.R.C.P. Lond., 1877; M.R.C.S. Eng., 1876.

Helsham, William Macdonald, L.R.C.P. Lond., 1888; M.R.C.S. Eng., 1887.

#### NEW ZEALAND.

Macdonell, James Alexander, M.B. & Ch.M. Aberd.

Fraser, John Robert, M.B. & Ch.B. Dubl., 1881.

Deamer, John Henry, M.B. & Ch.M. Edin., 1888.

Power, Patrick Joseph, L.R.C.S.I., 1886.

#### TASMANIA.

Bowers, Robert Farquharson, L. & L. Mid. R.O.P. & R.C.S. Edin., 1885.

#### VICTORIA.

Halahan, Samuel Handy, M.B. & Ch.B. Dubl., 1886.

Smith, David Chadwick, M.B. & Ch.B., 1880, M.D., 1883, Dubl.

### MEDICAL APPOINTMENTS.

Anderson, Eugene Wilton, M.B. & Ch.B. Melb.; L.R.C.P. & R.C.S. Ed., to be Public Vaccinator at the Women's Hospital, Melbourne.

Bacot, William Rickward, M.R.C.S. Eng., to be Government Medical Officer and Vaccinator for the district of Wollombi, N.S.W.

Belson, George de Veuille, M.R.C.S.E.; L.R.C.P. Lond., to be Government Medical Officer and Vaccinator for the district of Tumberumba, N.S.W., vice Dr. J. G. Bouchier, resigned.

Boyd, James Dunlop, M.D. & Ch.M. Glas.; L.F.P.S. Glas.; L.R.C.P. Ed., to be a Public Vaccinator at Sandhurst, Vic.

Buckby, Arthur Grey Heslridge, L.F.P.S. Glas., to be a Public Vaccinator for the district of Grey, N.Z.

Butler, Matthias, L.R.C.S. Irel., to be a Public Vaccinator for the district of Kaitangata, N.Z.

Carolan, James Frederick, M.R.C.S.E., to be a Public Vaccinator for the district of Mahurangi, N.Z.

Cordner, Louis Maxwell, L.R.C.S.I.; L.K.Q.C.P. Irel., to be Public Vaccinator for the district of Rakala (Canterbury), N.Z.

Davis, Robert Henry Douglass, M.R.C.S. Irel., to be Officer of Health for the district of Sheffield, Tas.

Deravin, Hugh Alexander, M.B. & Ch.B. Melb., to be Health Officer for shire of Gordon, also Public Vaccinator at Pyramid Hill, Vic., vice Dr. J. Ross, resigned.

Fetherston, Richard Herbert Joseph, M.B. & Ch.M. Ed., L.R.C.S. Irel., L.K.Q.C.P. Irel., to be a Public Vaccinator at Carlton, Vic.

Halahan, Samuel Handy, M.B. & Ch.B. Dubl., to be Public Vaccinator at Edenhope, Vic., vice Dr. E. McCausland, resigned.

Howard, Henry, L.R.C.S. Irel.; L.R.C.P. Ed., to be a Public Vaccinator for the district of Mercury Bay, N.Z.

Kennedy, John Timothy, L.R.C.P. & R.C.S. Edin.; L.F.P.S. Glas., to be Public Vaccinator at Cobram, Vic.

Ross, William Chisholm, M.B. & Ch.M. Melb., to be Public Vaccinator at Dimboola, Vic., vice Dr. T. Hora, who has left the district.

Russell, Robert Ussher, L.R.C.S. Irel., L.R.C.P. Ed., to be Assistant Medical Officer and Dispenser at the Coast Hospital, Little Bay, near Sydney, vice Dr. Weekes, resigned.

Sandford, Horace Charles, M.R.C.S. Eng.; L.R.C.P. Ed., to be Visiting Surgeon to the Gaol at Forbes, N.S.W.

Thwaites, Johnstone Simon, M.B. Melb., to be Public Vaccinator at Tallangatta, Vic.

Webb, Edward Robert, M.R.C.S.E., to be Government Medical Officer at Southport, Queensland.

Wisewould, Percy, M.B. & Ch.M. Ed., to be Public Vaccinator at Bacchus Marsh, Vic.

### BIRTHS, DEATHS, AND MARRIAGES IN AUSTRALASIA DURING 1887.

COLONY.	Area in Square Miles.	Estimated Population on the 31st December.	Births.	Deaths.	Marriages.	Per 1,000 of the Population.		
						Births.	Deaths.	Marriages.
New South Wales ...	309,175	1,042,919	37,236	13,448	7,590	36.42	13.15	7.42
Queensland ...	668,224	366,940	13,513	5,166	2,914	38.09	14.66	8.21
South Australia ...	903,425	317,446	10,831	3,944	1,977	34.56	12.59	6.31
Victoria ...	87,884	1,036,119	33,043	16,005	7,768	32.40	15.70	7.62
Western Australia ...	975,920	42,488	1,557	702	316	37.34	16.83	7.58
Total Australia ...	2,944,628	2,805,912	96,180	39,265	20,565	34.95	14.27	7.47
Tasmania ...	26,375	142,478	4,736	2,161	939	33.87	15.45	6.71
New Zealand ...	104,235	603,361	19,135	6,137	3,563	32.09	10.29	5.97
Total Australasia ...	3,075,238	3,551,751	120,051	47,563	25,067	34.42	13.64	7.19

## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castle-reagh Street, Sydney.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, NOVEMBER 15, 1888.

## EDITORIALS.

## FEDERAL QUARANTINE.

SOME three months back we published an article on federal quarantine, in which we promised to recur to the subject periodically until some steps were taken in the matter; we now fulfil this promise.

The only Australasian colony at the present time bringing out emigrants from the United Kingdom in any large number is Queensland, and to it we would more especially look for the effectual operation of quarantine laws. It is this class of arrivals which as a rule bring infectious diseases, the reason being that many come from overcrowded districts in England in which infectious disease is almost always to a more or less extent prevalent, measles and scarlet fever especially being of common occurrence. Then again, the Queensland emigrants are collected together some three or four days before sailing in the depôt established for them at Blackwall, so that all have to pass through the most overcrowded portion of London; and Blackwall itself cannot be said to be the healthiest part of "Modern Babylon"; moreover the depôt itself is possibly in an unsanitary condition, judging from the number of vessels on which measles prevail among the emigrants. Most assuredly, therefore, the risk run of importing infectious disease is greater in Queensland than in most other colonies, and it is clearly the duty of the Queensland Government to see that the strictest attention be paid to the carrying out of a wise scheme of quarantine laws. Equally is it the duty of the other colonies to see that she does so, and it seems to us that nothing short of FEDERAL quarantine will fulfil the conditions requisite to protect Australia from preventable

diseases being imported by way of Queensland. The latest vagary of that colony in administering quarantine law is the case of the "Duke of Argyll." This vessel arrived at Thursday Island, and according to the papers, was quarantined there, a case of measles being only one or two days convalescent. At Cooktown she received pratique; also at Cairns. So far as we can learn, at neither of these places were measles prevalent. On leaving Cairns a fresh case of measles appeared, and on arrival in Townsville the ship was again quarantined, and the passengers for that port landed on the quarantine ground, notwithstanding that cases of measles already existed in the town itself. A Government Gazette Extraordinary was issued proclaiming the ship infected, and she proceeded to Brisbane in strict quarantine. On arrival in Brisbane—or rather Moreton Bay—the Health Officer ordered the vessel into quarantine, and although he was distinctly told that no cases had ever occurred in the saloon, and that no cases had appeared amongst the single women for fourteen days, the vessel was detained five days in quarantine, notwithstanding the fact that she was cleared of her emigrants and fumigated thoroughly within 48 hours of her arrival. The single women were not released from quarantine for 12 days, although, as is before stated, no case had occurred among them for 14 days previous to their arrival, and that they had been entirely isolated both on board ship and on shore. The saloon passengers were allowed to proceed up in the ship, and those quarantined were visited, for the first time after arrival, by the Health Officer ten days after they had landed. It is want of discretion and want of attention to the ordinary dictates of common sense, such as this, that renders quarantine so obnoxious to the layman, and it is occurrences similar to these that induce us to again urge most strenuously the absolute necessity for a federal system. Let us have rules most carefully drawn up by thoroughly competent men, who shall decide definitely for what diseases quarantine shall be imposed. At the present time there is no examination by a Health Officer for any intercolonial boats, yet no one will be so venturesome as to assert that measles, chicken pox, and scarlet fever do not always exist to a greater or less degree in all our Australian capitals. Take, for instance, the case of the "Duke of Argyll" being quarantined for measles, when at the same time in Brisbane cases were known to exist. No doubt the quarantining was the correct thing to be done, but why should not a little more judgment have been exercised in the method of imposing it. We trust we have offended no one in our remarks thereon, for they are made in the



friendliest spirit; nay, on some points, we have with some difficulty curbed a desire to be hostile in our observations, which are simply fair comments on what appears to us an unfair way of carrying out quarantine. Indeed, it is such inconsistent action as this that forms one of the strongest arguments in favor of a system of federal quarantine, controlled by a Central Board of Health, and free from all the red-tapeism and officiousness of lay Government officials. Let this Board be at once established, and let its officers be answerable to it alone, and not to any layman in any particular colony, as is the case in Queensland, where the Act says, "If a ship is ordered into quarantine by a Health Officer, he shall forthwith report the matter to the Minister," who may, as in the case of the "Decca," quoted in our last article, grant pratique. This undoubtedly is a wrong system where, having called in professional assistance for the benefit of the public health, the authorities ignore the advice given, unless, of course, this advice be contrary to common sense.

The establishment of a system of Federal quarantine on the lines laid down by the Australasian Sanitary Conference of 1884, is urgently necessary, for, without it, the peril to Australia from the introduction of new and terrible diseases is continuous and deadly.

#### THE PROPOSED ESTABLISHMENT OF AN INEBRIATE ASYLUM IN QUEENSLAND.

A MEETING has recently been held in Brisbane advocating the establishment of an Inebriate Asylum in that colony, a deputation subsequently waiting on the Premier, who, in response to its request, promised to introduce a bill in Parliament for the purpose.

We have always held the opinion that legislation in this direction is advisable in these colonies, and fully concur in the opinions expressed at the meeting that continuous habitual drunkenness should be looked on more as a disease than a crime. The consequences to the unhappy victim to this terrible craving are so fearful that no one but a man not responsible for his action in this particular direction would yield to it. We think that to be really effective, admission to the institution must not always depend on the mere voluntary act of the victim, but it must be provided that on the information of near relatives, or business partners, or at his own desire—proper

proof of the necessity, of course, being given—it should be in the power of the appointed authority to commit the drunkard for treatment for a definite and sufficient period for his cure. We do not think that these committals should be made by an ordinary magistrate, but only by a Supreme Court Judge, in Chambers, or by a District Court Judge, or possibly a Stipendiary or Police Magistrate in open court. We think it advisable to give this power to Police magistrates to meet the requirements of country cases, and if the power is given to them it would be illogical to exclude stipendiary ones. We have personal knowledge of the defects consequent on the *voluntary* confinement of inebriates, as before they have been sufficiently long under treatment to have regained complete self-control they have insisted on release, almost immediate relapse being the result.

#### JURORS AT THE MELBOURNE CENTENNIAL EXHIBITION.

DR. ASHBURTON THOMPSON recently received peremptory notice from the Chairman of Juries at the Melbourne Exhibition that he had been appointed a juror for sanitary exhibits. The communication assumed, without inquiry, that he would be willing to undertake the responsible duty thus thrust upon him, notwithstanding that it was exceedingly onerous, including as it does the testing of apparatus for heating and lighting. Instructions for the performance of the duties were enclosed. We, however, understand that he has declined to serve. The remuneration attached to the post appears to be of the kind usually described by the phrase, "nothing a week and find yourself," a free pass between Albury and Melbourne being the sole contribution guaranteed by the chairman towards the inevitable expenses. Obviously an honorary position of this kind would be more appropriately offered to millionaires in search of employment than to busy men of science; but it cannot be denied that the latter, and members of the medical profession perhaps more especially, have themselves to thank for the numerous opportunities of giving valuable services for nothing with which the public kindly furnish them. As long as scientists consent to do important work gratis, so long will they find themselves undervalued and their work despised. It would be well if the Spanish proverb, "The physician who takes no fee gives a worthless prescription," were more steadily borne in mind in this connection.

## LETTERS TO THE EDITOR.

## CHRONIC RHINITIS.

*(To the Editor of the A. M. Gazette.)*

Dear Sir, — Perhaps some of your readers will kindly offer some suggestions on the treatment of an obstinate case of chronic rhinitis. I am myself the patient, and have suffered from this troublesome complaint for three or four years. There is a continuous thin mucous discharge from both nostrils, always affected by change of weather, when it becomes thick and tenacious, and of much the same appearance as during an ordinary cold. I may add that I am very subject to "cold in the head," as a sequela of which I almost invariably suffer from a patch of erythema, extending from the right ala nasi half-way across the cheek. The lining membrane is more or less congested, and occasionally excoriated, when small crusts will form on the denuded patch. There is no tendency to ozæna, nor is there any foulness of breath. The nose externally presents from the bridge to the tip an almost uniform dark red colour, and on one occasion about two years ago was further ornamented by a pustular eruption, which lasted three or four months. These appearances naturally lead the uneducated to put me down as a drunkard, whereas the very reverse is the case, although I am not a strict totaler. In every other respect I am in perfect health, and have nothing in my family history, except gout, to bear on the case. I have used externally ointments of mercury, tar, vaseline, and lanolin; and internally sprays and insufflations of boracic, tannic, and gallic acids, quinine, carbolic lotions, and vaseline; but nothing has more than a slight temporary effect. So far as I can judge the rhinitis does not extend beyond the middle turbinated bone, and there is never any sign of extension to the posterior nares, nor is there polypus or any foreign body. I shall only be too glad to give a trial to any mode of treatment your readers may be kind enough to suggest.

I am yours, etc.,  
"RUBEUS."

## A QUERY.

*(To the Editor of the A. M. Gazette.)*

DEAR SIR, — I should feel grateful for your opinion as to what is the duty of medical men in circumstances such as the following:—

A young girl, ætat 17, is taken ill with severe abdominal pains, &c., and the mother sends for the doctor, who, on arrival, finds the girl has just miscarried, and discovers the foetus among the clots which have been expelled. On making enquiries as to the cause of the illness he is told the girl has been taking medicine from a chemist, and is shown a bottle labelled "Oil of Pennyroyal," and a box which is said to have contained pills. The girl makes a good recovery, and apparently suffers no injury.

Cases where the medical attendant has good reason to suspect that drugs have been obtained from advertising quacks or chemists, and used for the purpose of procuring abortion, must be numerous to all general practitioners, and when such cases end fatally, or even where life is endangered, an enquiry is generally made, and the affair is thoroughly sifted. But when things do not take so serious a course everything is hushed up, and there is no more about the matter. Now, no

medical man wishes to pose as a detective, and it is obviously dangerous to even speak freely of such cases unless the proofs are very clear. [In the Hall poisoning case in N.Z. the medical attendant was praised for his courage in communicating his suspicions of foul play to the police.]

What I would ask, therefore, is this:—What should a medical man do in cases where he is called in to attend, and he has very strong reasons to believe that some drug has been used by his patient to procure abortion?

I am, &c.,

## COUNTRY SURGEON.

[THE question submitted by our correspondent is a difficult one to decide. It is the first duty of a medical man to protect the life and health of his patient, and we think that the moral reputation of the person concerned should be equally conserved. It must not be forgotten that the particulars in such a case are confided to him as a professional secret, and that he is in the same position as a clergyman who has received a confession. No priest is considered culpable for not betraying the secret of a crime confided to him under the seal of confession, and we take as regards the secret of his patient. The Hall case is not a parallel one, for in it there was no betrayal of confidence; Dr. McIntyre giving information to save his patient, whose life was threatened by a criminal whose intention he had detected. In the example given by the writer, we think the medical man should point out to the patient and her friends, on her recovery, that a criminal act had been in all probability committed by the person who prescribed and supplied the drugs, and that it was their duty to inform the authorities. We are of opinion his responsibility would end there.]

ED. A.M.G.]

## CASE OF PLEURODYNIA.

*(To the Editor of the A. M. Gazette.)*

SIR, — The following case may be interesting and instructive to some of the readers of the *Gazette*, as it is one not often met with.

A lady, who was confined a month ago, and who suckled her infant, was taken with rigors, vomiting, and muttering delirium. I was sent for, and on arrival found her extremely low, with a temperature of 104.5° F., glazed tongue, short and impeded breathing, and intense pain in the right chest, with a dry, irritating cough. The rigors, high temperature, cough, and pain pointed to acute pneumonia, although the pain and respiration were more like those of pleurisy. On further examination, however, there was no evidence of lung disease.

My diagnosis was pleurodynia, from extreme nervous exhaustion, caused by suckling and a continuance of the uterine discharge, which was still red. The high temperature was, I think, purely nervous. I also came to the conclusion that the patient, who is very excitable and quite of the "nervous constitution," would, if she had not then been attended to, have passed into a condition of puerperal insanity.

The result of the case, which, with appropriate treatment, ended in convalescence, with loss of pain, etc., in forty-eight hours, showed the correctness of the diagnosis.—Yours truly,

A. G. E. NAYLOR, L.R.C.P. & L.R.C.S., Edin.  
Swansea, Tasmania, 1st November, 1888.

## THE MONTH.

## NEW SOUTH WALES.

At a meeting of the Senate of the University of Sydney, held on October 15, Professor Stuart stated that in consequence of the decision of the last meeting of the Senate to the effect that the first year in arts should be retained as an introduction to the medical curriculum, he withdrew the report of the Faculty of Medicine recommending an amended medical curriculum.

The Board appointed by the Government to watch the experiments recently made at Junee by the representatives of M. Pasteur, in demonstrating the efficacy of M. Pasteur's "Vaccine of Anthrax" as a preventive against anthrax or Cumberland disease in sheep and cattle, have presented their report to the Minister for Mines. The Board are unanimously of opinion that Dr. Germont and M. Loir have conclusively demonstrated the efficacy of M. Pasteur's "Vaccine of Anthrax" as a preventative against anthrax (Cumberland) disease, and therefore recommend its adoption and use.

In the Legislative Assembly, on October 24, the Minister for Works laid upon the table of the House a statement written by Mr. C. A. Goodchap just prior to his retirement from the position of Commissioner for Railways, from which we take the following passage with reference to ambulance arrangements:—"The possibility of accident is one which a railway manager should have in view and make provision for. I was always of opinion that much suffering might be saved and much benefit accrue if some number of the employes were made competent to afford 'first aid to the wounded' in case of casualty. In this view I compiled a pamphlet on the subject, and issued it to every employe, and engaged competent professional men at the chief centres to give instruction to those desirous of identifying themselves with so laudable a service. In due time I established an ambulance corps, which has had remarkable success. Professional examinations have been instituted and medals of honor are conferred on the successful candidates. The result of this plan is that we now have, scattered over the lines, a large body of men competent to render prompt and skilful aid in any casualty that may occur, and thereby avert much bodily suffering, and even save life in cases where instant precautions are necessary to that end. The practical value of this institution has already been experienced when accidents—such as cannot be avoided in a large concern like this—have happened on the lines and in the workshops."

The number of deaths recorded in New South Wales during 1887 was 13,448, and of these 5,620 were under five years of age; 1,978 deaths (14.71 per cent.) were due to zymotic diseases, 61 (0.45 per cent.) to parasitic diseases, 179 (1.33 per cent.) to dietetic diseases, 1,896 (14.10 per cent.) to constitutional diseases, 1,128 (8.39 per cent.) to developmental diseases, 6,110 (45.43 per cent.) to local diseases, 1,148 (8.54 per cent.) to violence, and 948 (7.05 per cent.) to ill-defined causes.

At a public meeting held at Albury on October 30, to take into consideration the condition of the finances of the Albury Hospital which have reached such a low state that at the last meeting the committee decided to give the officials notice that their services would be dispensed with at the end of the year, with a view of

closing the institution, it was decided to make application for a special grant on the grounds that the hospital is situated on the highway between the two colonies, and demands are made upon the institution by the people belonging to all parts of both colonies.

The foundation stone of a new hospital at Yass was laid by Lord Carrington on Oct. 18.

A SPECIAL meeting of the Sydney Municipal Council was held on November 1, for the purpose of electing a gentleman to fill the office of City Health Officer. The following were the candidates:—Dra. G. P. Baldwin, W. R. Clay, H. M. Curtayne, W. R. Cortis, G. F. Dansey, C. A. Edwards, H. E. Garrett, C. S. Gibbons, W. H. Goode, L. R. Huxtable, T. M. Kendall, G. L. O'Neill, J. Spofforth, J. Ward, W. G. Watson, and G. Watt. It was decided that the election should be reduced to three ballots, in the first the candidates to be reduced to four, the second to two, and the final ballot. The results of the ballots were as follow:—First ballot: Dr. Clay, 13 votes; Dr. O'Neill, 13; Dr. Dansey, 11; Dr. H. E. Garrett, 9. Second ballot: Dr. Clay, 11; Dr. Dansey, 8; Dr. O'Neill, 7; Dr. Garrett, 2. Final ballot: Dr. Clay, 11; Dr. Dansey, 8. The Mayor declared Dr. Clay elected.

It is with feelings of regret that we record the death of Mr. Christian Bohrsman, M.R.C.S. Eng. et L.R.C.P. Lond. 1886, who died at the residence of his parents, at Stanmore, near Sydney, on October 23, at the early age of 30. The deceased gentleman was a native of Sydney, and after taking his degrees in England, he returned to the colony two years ago and practised ever since at Elizabeth Street, Hyde Park. From the beginning he was unusually successful in practice, and his loss is deeply felt by a wide circle of friends.

DR. J. G. BOURCHIER, who for the last six years practised at Tumbarumba, was on leaving the district presented by Mr. J. F. Makinson, P.M., on behalf of the principal residents, with an illuminated address, accompanied with a purse of sovereigns.

DR. L. G. DAVIDSON, late of Richmond, has succeeded to the practice of Dr. B. J. Newmarch, at Bowral.

DR. H. P. C. GORRICK has removed from Tamworth to Waverley, a suburb of Sydney.

On the evening of October 17, the Resident Medical Officers of the Sydney Hospital gave a farewell dinner to Dr. Gwynne-Hughes, who has relinquished his position of resident medical officer of the institution, which he had held for some time, to enter into private practice in the Redfern district.

DR. W. McMURRAY, formerly of Sydney, and late of Walgett, has resumed practise in Sydney, at No. 2, Lyons-terrace, Liverpool-street, in connection with Dr. H. H. Marshall.

DR. W. K. MACROBERTS, late Medical Officer of the Wentworth hospital, has removed to Newcastle, where he has been appointed one of the Medical Officers of the United Friendly Societies' Dispensary.

DR. R. J. MORICK, late of Quorn (S.A.), has settled at Tenterfield, near the Queensland border.

DR. G. NAGEL has settled at Cassilis, 223 miles N. of Sydney.

DR. B. J. NEWMARCH, J. P., who has been practising in Bowral for the past three years, has removed to Strathfield, near Sydney. Before his departure he was presented with a handsome gold watch by numerous friends in the district. The presentation took place on October 26, by the Mayor of Bowral, in the presence of

a very large gathering of ladies and gentlemen. On October 22 the members of the Carnarvon Masonic Lodge entertained him at a banquet, at which a very handsome address was presented to him.

DR. J. A. PYBUS, formerly of Murwillumbah, has recommenced practice at Terranora, on the Tweed River.

DR. ROBERT SMITH, late of Penola (S.A.), is now practising at Broken Hill.

DR. J. C. SOUTER, late of Bingera, has succeeded to the practice of Dr. A. Watson, at Orange.

DR. C. G. THORP has removed from Mt. Kembla to Milton, 155 miles S. of Sydney.

DR. C. J. WEEKES, late Assistant Medical Officer at the Little Bay Coast Hospital, has succeeded to the practice of Dr. C. S. Gibbons at Lithgow.

DR. J. S. WILSON, formerly of Melbourne, has removed from Kiama to Bowral, a favorite health resort, 80 miles S. of Sydney.

#### NEW ZEALAND.

THE western wing of the Sunnyside Lunatic Asylum, near Christchurch, was destroyed by fire on October 16. The damages are estimated at £12,000. Naturally the patients were a source of the most grievous anxiety when the fire broke out. It is satisfactory to relate that in this instance no panic occurred, and that the patients, 230 in number, were got safely away without mishap.

DR. M. BUTLER, late of Christchurch, has commenced practice at Kaitangata, in a coal-mining and farming district, 60 miles S.W. of Dunedin.

DR. J. F. CAROLAN, who has practised at Waipu for the last three years and a-half, has removed to Warkworth, 42 miles N. of Auckland.

DR. P. CONNOLLY, of Wanganui, has been appointed a member of the Medical Board at Wanganui, constituted under "The Military Pensions Act, 1866."

DR. J. H. DEAMER, jun., having completed his studies at the Edinburgh University, has returned to the colony and commenced practice at Christchurch, in conjunction with Dr. W. Deamer, sen.

DR. J. R. FRASER has commenced practice at Riccarton, a suburb 2 miles from Christchurch.

DR. J. A. MACDONELL, a new arrival, has settled at Dennistown, 13½ miles from Westport.

DR. ALEX. JOHNSTON, of Wellington, has resigned his appointment as Coroner for the colony.

#### QUEENSLAND.

AT the Thargomindah Petty Debts Court, on October 18, Dr. Harding sued Dr. Magill, for the recovery of 5 guineas for the administering of chloroform to a patient of the latter; a verdict was given for the plaintiff for £4 and costs. A cross case, Magill v. Harding, claiming 5 guineas for consultation, was dismissed.

DR. JAS. BOOTH, late of Gympie and Thornborough, has commenced practice at 4 Hyde-terrace, Melbourne-street, South Brisbane.

DR. A. NICOLL, of Tambo, has been appointed a member of committee for the local State school.

#### SOUTH AUSTRALIA.

THE S.A. Branch of the British Medical Association, representing a large majority of the medical profession of South Australia, at their September meeting regretted the action of the Civil Service Commission in

recommending that the services of Dr. Whittell, as President of the Central Board of Health, should be dispensed with, and expressed their hope that the Government would not carry out the suggestion, feeling that the colony can ill afford the loss of an officer whose special experience and scientific attainments are essential qualifications for the important position he holds. We now understand that the Government do not propose to retrench Dr. Whittell, though he will, it is believed, be expected to discharge the duties of the City Coroner in addition to those of his own office.

DR. JAS. PHILLIPS, of Adelaide, has been appointed President of the South Australian Medical Board, vice Dr. Geo. Mayo, resigned.

DR. E. C. STIRLING, of Adelaide, has been re-appointed a member of the Board of Governors of the Public Library, Museum, and Art Gallery of South Australia.

PROFESSOR DR. WATSON, of the Adelaide University has obtained three months' leave of absence to enable him to accompany Sir T. Elder to England.

#### TASMANIA.

DR. E. J. CROUCH, of Hobart, Surgeon of the Southern Tasmanian Artillery, has been promoted to the rank of Surgeon-Major.

#### VICTORIA.

IN reply to an inquiry from the Registrar of the Melbourne University as to whether instruction in such special branches as diseases of women, diseases of children, diseases of the eye, ear, and throat could be obtained in the Alfred Hospital, the chairman of the Hon. Medical Staff, Dr. W. H. Embling, reported to the Committee that the Staff were willing to teach those several subjects as soon as the necessary accommodation was provided, it being necessary that in either case a certain number of additional beds should be set apart for the purpose.

DR. LEWELLIN, Registrar of the Clinical School of the Melbourne Hospital, on applying to the Council of the Melbourne University for the grant of £400 voted by the Council in aid of clinical lectures and tutorial instruction for the current academical year, referred to the work done in the Clinical School, and stated that lectures in accordance with the agreement entered into by the Staff of the hospital had been regularly delivered at set intervals by seven members of the Staff who undertook the duties of lecturers, whilst the eighth member, who declined to officially associate himself with the scheme, also delivered a lecture. Thus 15 lectures had been delivered in clinical medicine, and 16 in clinical surgery. Tutorial instruction had been regularly given by all the out-patient physicians and surgeons, and also by the whole of the in-patient staff. Hospital practice had been open to students, as in previous years, but a decided improvement had been made by the stricter enforcement of the attendances of the students, and by the more general regularity of the staff. *Post-mortem* demonstrations had been given whenever necessity had arisen, and the pathologist or acting pathologist had attended daily to make whatever autopsies had been required, and at the same time to instruct the students. The work done had been, on the whole, a great improvement on that of past years, not only on account of the greater pains taken, and the greater regularity of attendance by both students and staff, but also by the much larger amount of tutorial instruction given.

A CENTENNIAL gift of £10,000, in £100 donations, to

wipe off the overdraft of the Melbourne Hospital, was subscribed in Melbourne during the last week of October.

THE Eye and Ear Hospital, East Melbourne, narrowly escaped being burned down on October 15.

FOURTEEN cases of measles have occurred at Winslow, 171 miles S.W. of Melbourne.

SCARLET fever is prevalent at Rupanyup, 214 miles N.W. of Melbourne.

MR. MARTIN FRANCOIS CLEARY, L. et L. Mid., R.C.P. et R.C.S. Edin. 1874, who practised at Beechworth for the last 13 years, is dead.

MR. JOHN HENRY OSBORNE, M.R.C.S. Eng., 1876; L.S.A. Lond., 1875, Honorary Surgeon of the Echuca Hospital, died at his residence, Echuca, on October 25, at the age of 38. The deceased gentleman, who arrived in the colony nearly eight years ago, was the eldest son of Dr. J. H. Osborne, of Southwell, Nottinghamshire. In the old country he held the position of Senior House Surgeon at the Nottingham General Dispensary.

DR. J. M. GIBBES, late of New Plymouth (N.Z.), has commenced practice at Middle Brighton, near Melbourne.

DR. GEORGE GRAHAM has been appointed Returning Officer for the electoral district of Richmond.

DR. H. S. HALAHAN, late of Enniskillen (Ireland), has settled at Edenhope, on lake Wallace, 294 miles W. of Melbourne.

DR. J. T. KENNEDY, a recent arrival, has settled at Cobram, 200 miles N.E. of Melbourne.

DR. P. H. LITTLE has resigned his position of Junior Deputy Medical Superintendent of Hospitals for the Insane in Victoria.

DR. H. F. MAIN, of Malsbury, and Dr. J. F. Manson, of Dunolly, have been appointed Certifying Medical Practitioners under the "The Factories and Shops Act, 1888," for their respective districts.

DR. JOHN NICHOLSON, of Benalla, has been appointed a Surgeon on the Medical Staff of the Victorian Mounted Rifles, with the relative rank of Captain. The appointment to date from the 3rd October, 1888.

DR. B. J. ROSS has removed from Pyramid Hill to Macarthur, 244 miles W. of Melbourne.

DR. W. C. ROSS has settled at Dimboola, in the Wimmera district, 252 miles N.W. of Melbourne.

DR. B. STEVENSON has resigned the position of Public Vaccinator at Healesville.

DR. D. C. SMITH, late of Lowestoft, England, has commenced practice at Dandenong.

MR. J. TREMEARNE, who has been Medical Superintendent of the Creswick Hospital for the last 16 years, has resigned the position.

DR. P. WISEWOULD has settled at Bacchus Marsh, 31 miles N.W. of Melbourne.

#### WESTERN AUSTRALIA.

A BILL to amend the law respecting quarantine is to be introduced into the Legislative Council during the forthcoming Session.

MEDICAL PRACTICE in BRISBANE for Transfer. Address—"TRANSFER," care of Mr. Watkins, Chemist, Brisbane.

## BIRTHS, MARRIAGES, AND DEATHS.

\* The charge for inserting announcements of Births, Marriages, and Deaths is 2s 6d, which should be forwarded in stamps with the announcement.

### BIRTHS.

ADAM.—On the 25th October, at East Melbourne, the wife of G. Rothwell Adam, M.B., of a daughter.

BARTLETT.—September 16, at Cowra, N.S.W., the wife of Dr. F. P. Bartlett, of a son.

BLACK.—On the 30th October, the wife of Dr. Archibald G. Black, Carlton (Melbourne), of a daughter.

FLEMING.—On the 15th September, at Donald, Victoria, the wife of Dr. H. H. Fleming, of a daughter.

KESTIVEN.—On the 17th October, at Brisbane, the wife of Dr. L. Kesteven, of a daughter.

LANE.—On the 5th October, at Camberwell, Victoria, the wife of G. T. Lane, M.B., Ch.B., of a son.

MALCOLMSON.—On the 14th September, at Port Melbourne, Victoria, the wife of Dr. Malcolmson, of a daughter.

NOLAN.—On the 1st October, at Warragul, Victoria, the wife of Dr. Lyster Nolan, of a son.

O'DONNELL.—On the 30th September, at North Melbourne, the wife of Dr. N. M. O'Donnell, of a daughter.

ROWLEY.—On October 12, at Bombay (Prov. Auckland), N.Z., the wife of Charles Rowley, M.R.C.S. Eng., of a son.

WEBB.—On the 6th October, at South Brisbane, the wife of Dr. W. S. Webb, of a daughter.

WILKINSON.—On the 19th October, at Mornington, Victoria, the wife of A. M. Wilkinson, M.B. et Ch. B., of a daughter.

WILLIS.—On 17th October, at Daylesford, Victoria, the wife of T. B. H. Willis, M.B., Ch.B., of a son.

### MARRIAGES.

BURTON—MOORE.—On the 17th October, at Trinity Church, East Melbourne, William Henry Burton, M.D., of Richmond (Victoria), to Agnes Frances, fifth daughter of James Moore, comptroller of Savings' Bank, Melbourne.

LEMPRIERE—CROOKE.—On the 17th October, at St. John's Church, Toorak (Melbourne), by the Rev. W. Fellows, M.A., Charles L. Lempriere, M.B., O.M., to Alice Dale, daughter of the late Edward Crooke, of Rosedale, Gippsland.

O'HARA—OSBORNE.—July, 11, at Abbotsford, London, Dr. O'Hara, of Melbourne, to Nina, eldest daughter of George Osborne, Fxton.

READ—SAYWELL.—September 13, at Lady Robinson's Beach, near Sydney, by the Rev. S. Savage, George Read, L.R.C.S.I., of Kogarah, to Rose, second daughter of Mr. Thomas Saywell.

TUTHILL—MACLEOD.—On the 18th October, at St. George's Presbyterian Church, St. Kilda (Melbourne), Dr. John Tuthill, of Euroa, Victoria, to Anna C. Macleod, daughter of the late Donald Macleod, of North Brighton.

### PUBLICATIONS RECEIVED.

*Considerations of Phytographic Expressions and arrangements.* By Baron Ferd. Von Mueller, K.C.M.G., M.D., Ph.D., F.R.S. (Reprint.)

*A Treatise upon the proper Management, Nursing, and Dietary of Infancy and Childhood, and upon Diseases of Children.* By J. P. McNeill, B.A., M.D., Sydney, 1888.

Mr. BRUCK has just received a large supply of those well-known American stout morocco leather *Abdominal Belts*, with elastic front and sides, and natural uterine supporters combined, in all sizes, with vulcanite cup and stem for prolapsus, or anteversion, or retroversion, and I. R. tubes, complete, price 20s., postage paid. Mr. Bruck has also received shipments of the latest English and American medical works by the R.M. steamers "Ormuz" and "Zealandia;" a list of some of the books in stock will be found in this issue.

## REPORTED MORTALITY FOR THE MONTH OF SEPTEMBER, 1888.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
<b>N. S. WALES.</b>														
Sydney .....	132,846	283	143	42	...	...	3	...	4	2	15	10	1	3
Suburbs .....	215,849	815	267	105	...	5	17	...	3	10	36	21	10	6
<b>NEW ZEALAND.</b>														
Auckland .....	35,639	77	25	8	...	1	...	1	1	2	1	2	4	1
Christchurch .....	16,217	32	14	4	...	...	...	...	...	...	...	...	...	...
Dunedin .....	24,334	39	27	7	...	...	1	...	...	...	5	4	2	...
Wellington .....	28,235	86	32	8	...	...	1	1	2	...	3	3	1	2
<b>QUEENSLAND.</b>														
Brisbane .....	51,689	208	82	46	}	...	5	...	2	18	13	4	...	2
Suburbs .....	21,960	116	33	17										
<b>SOUTH AUSTRALIA.</b>														
Adelaide .....	310,454	832	264	80	...	...	19	...	5	3	23	21	12	8
Adelaide .....	43,527	82	59	15	...	...	6	...	...	2	10	7	2	...
<b>TASMANIA.</b>														
Hobart .....	32,056	73	45	9	...	...	2	...	1	...	1	5	3	...
Launceston .....	20,193	53	34	7	...	...	...	...	2	..	2	5	...	...
Country Districts.....	93,041	285	65	...	...	...	3	...	2	1	...	...	...	...
<b>VICTORIA.</b>														
Melbourne .....	69,774	167	84	175	2	3	26	1	7	6	60	71	14	14
Suburbs .....	275,606	1,209	529											

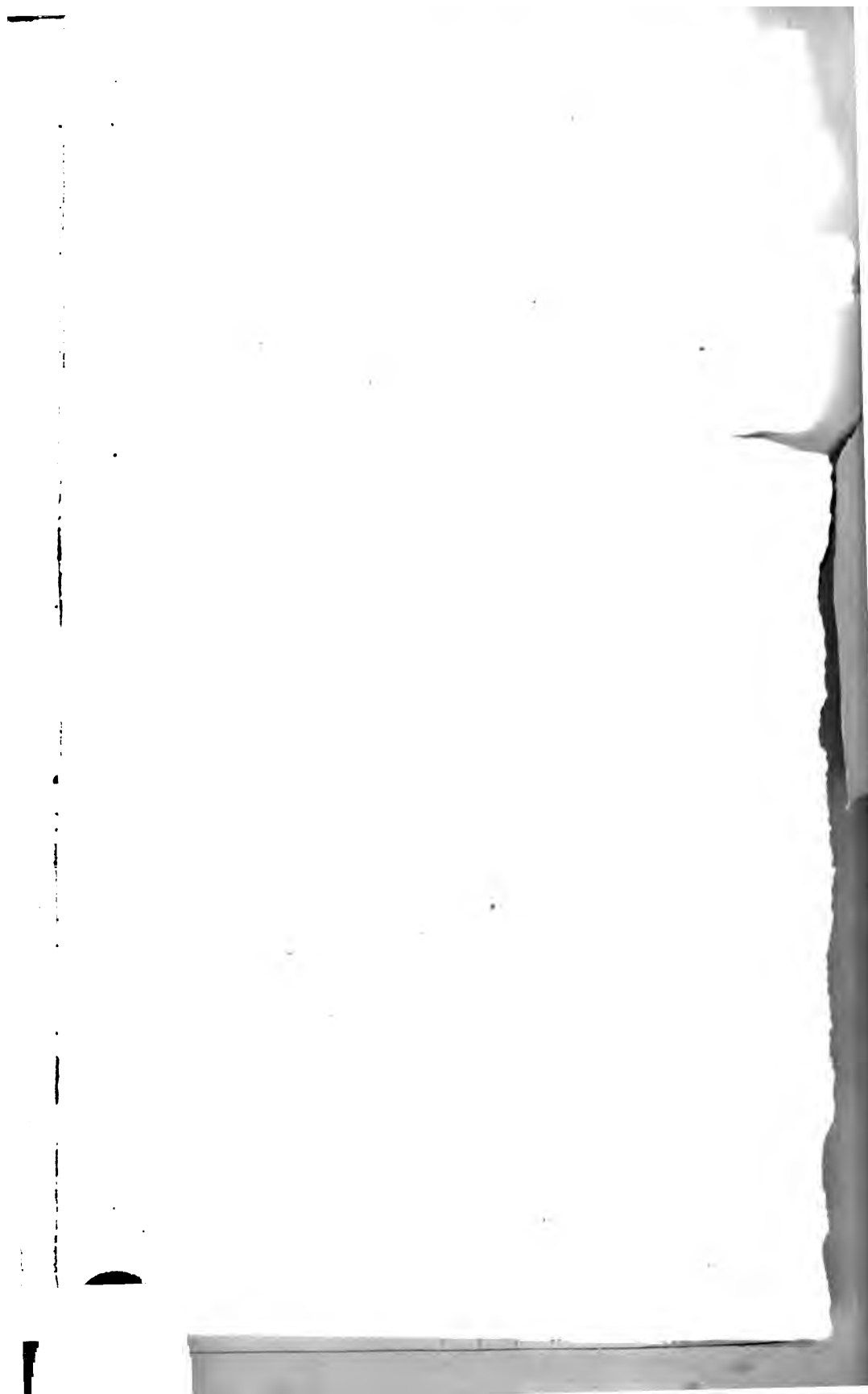
## METEOROLOGICAL OBSERVATIONS FOR SEPTEMBER, 1888.

STATIONS.	THERMOMETER.					Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.	Depth.		Days.			
Adelaide—Lat. 34° 55' 33" S. ; Long. 138° 36' E.....	...	84.7	59.7	38.7	30.046	Inches	...	...	...	...
Auckland—Lat. 36° 50' 1" S. ; Long. 174° 49' 2" E.....	135.67	53.7	40.0	...	...	0.910	10	75	...	...
Brisbane—Lat. 27° 28' 3" S. ; Long. 153° 16' 15" E. ....	141.8	88.0	64.5	46.8	30.162	2.242	9	66	s.	...
Christchurch—Lat. 43° 32' 16" S. ; Long. 172° 38' 59" E.....	135.2	80.0	48.8	30.6	...	1.302	6	67	...	...
Dunedin—Lat. 45° 52' 11" S. ; Long. 170° 31' 11" E.....	122.76	47.7	33.0	...	...	0.360	8	75	...	...
Hobart—Lat. 42° 53' 32" S. ; Long. 147° 22' 20" E.....	...	79.0	52.2	35.0	30.073	2.29	12	72	...	...
Launceston—Lat. 41° 30' S. ; Long. 147° 14' E.....	...	74.0	52.1	29.5	30.130	3.33	13	73	...	...
Melbourne—Lat. 37° 49' 54" S. ; Long. 144° 58' 42" E. ....	...	80.1	54.2	34.4	30.082	1.28	8	...	...	...
Sydney—Lat. 33° 51' 41" S. ; Long. 151° 11' 49" E. ..	...	80.8	58.7	44.8	30.187	2.704	20	73	N.E.	...
Wellington—Lat. 41° 16' 25" S. ; Long. 174° 47' 25" E.....	121.64	52.1	37.0	...	...	1.805	10	72	...	...

*"CAL GAZETTE."*

**N**

**IN AUSTRALIA,**





# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### PREVALENCE AND DISTRIBUTION OF CALCULUS IN THE BLADDER IN AUSTRALIA. [With Map].

By J. B. NASH, M.D., M.R.C.S.E., GOVERNMENT MEDICAL OFFICER, WALLSEND (NEWCASTLE), N. S. WALES.

WITH a view to making some investigations into the general existence of, and the various areas in which, stone in the bladder is to be found in Australia, I, in the beginning of this year, sent a circular to each of the one hundred and seventy-two (172) hospitals which are at present in use upon the continent, asking for information as to :

—1st. The number of cases treated during the years from 1878 to 1887 inclusive ; 2nd. The operations performed ; and 3rd. The variety of calculus resulting from these. The questions were purposely few and short, in order not to give too much trouble to the gentlemen upon whose time and goodness I was trespassing, and knowing that in the largest number of the institutions applied to, more or less, if any, records are kept of the cases treated within their walls. The replies number sixty-eight (68), telling of two hundred and forty-three cases. Ninety-one of these occurred in New South Wales, eighty-nine in Victoria, fifty-three in South Australia, six in Tasmania, four in Queensland, and none in Western Australia. The answers are as numerous as could have been looked for, and the knowledge obtained will tend to show, in a manner, the frequency of occurrence of "the stone in the bladder," as a recognised disease extending over a wide area in this country. My best thanks are due to those gentlemen who have been so good as to answer my queries, and here let me offer it to them. It may be taken for granted that, with a few exceptions, no cases have been treated in those hospitals from which word has not been received. Perhaps the disease is known in the districts which some of these hospitals serve ; but, owing to the sufferers going to some other locality for treatment, or to changes in the medical residents, the knowledge was not to hand to be forwarded to me. Several of the institutions have only lately been constructed, and the records are not yet kept. Further, there is a general tendency in cases of this nature, for persons to seek aid in the large cities, in the hope that some means, other than operative, may be found for relieving the distressing signs and symptoms which characterise them. In time, when relief must be had

recourse to, it often happens that the city surgeon in the hospital or privately removes the calculus. This is one reason why, in the great central institutions, operations of this kind are more numerous than would be expected from the population that surrounds them ; for example, of the ninety-one cases that have occurred in New South Wales, seventy-eight are reported from Sydney ; and of the eighty-nine in Victoria, fifty were treated in the Melbourne and Alfred hospitals ; also in South Australia, out of fifty-three cases no less than forty-five were in Adelaide. These numbers are out of proportion to the distribution of the populations. The tendency in all the colonies is towards centralisation, and the majority of the people are attracted to the Metropolis. Taking the numbers from Victoria, where four hundred thousand of the inhabitants are in or around Melbourne, this being a little over one hundred thousand less than half of the total population of the colony, many more than half the number of calculus cases occurred there in the year 1887. This disproportion is more marked in New South Wales and South Australia.

The following table shows the number of cases treated during each of the last ten years, the totals for any one of the years, and the whole number for any colony and for them all :—

	New S. Wales.	Vic- toria.	South Austr.	Queens- land.	West'n Austr.	Queens- land.	To- tals.
1878 ..	8	3	7	..	..	..	18
1879 ..	4	3	3	..	..	..	10
1880 ..	7	6	4	..	..	..	17
1881 ..	7	4	4	..	..	..	15
1882 ..	8	14	8	..	..	..	27
1883 ..	6	14	5	..	..	1	26
1884 ..	10	8	5	2	..	1	26
1885 ..	13	9	5	..	..	2	29
1886 ..	14	11	5	1	..	1	32
1887 ..	17	17	7	1	..	1	43
Totals ..	91	89	53	4	..	6	243

By reading down the last vertical row of figures the number of cases will be noticed to increase, especially from the year 1881, till in 1887 more than twice as many occurred as in 1878. This is what might be expected, if only because the population had doubled ; but some indirect causes have contributed to make my record more complete. For instance, the number of hospitals has multiplied, the records in the established ones are more carefully kept, the surgeons have been more settled, and cases have been more carefully investigated. A special point in this relation would be the consideration, whether the subjects of the affection were natives

of the colonies or of other countries, whether they had any signs or symptoms of the disease before they came to reside where they were treated by operation, and if so from what part of the world each came? Reference to the 13 cases that I have collected from the Newcastle district gives 10 as being natives of New South Wales, and two of the north of England, and one of Wales. Nine of the 10 were born in the Newcastle district, and the three patients born outside the country were 34, 48, and 66 years of age. It was long after they had come to reside here that they suffered from any trouble with the urine. I cannot work this point for all the cases that I have collected, as the information to hand does not bear upon it. A coincidence in three of my own cases, one adult and two children, is that the patients resided within two hundred yards of one another, on the slope of the same hill. The superficial, the general, and the geological surroundings are the same as in other parts of the district. They use rain water for all

purposes, and their mode of living differs little, if any. The three calculi were unlike in composition, and the sufferers were in every other respect healthy individuals. My endeavour to find some definite cause for the occurrence, in this particular spot, of so many cases, while the rest of the district furnished but two cases in the same period, has failed; so far it must be looked upon as merely accidental. Further investigation may lead to the discovery of some other and more satisfactory explanation of the matter, though in older countries than ours labour and time have failed to formulate an absolutely acceptable and definite theory for the occurrence of this disease.

Out of the 68 replies to my circulars, 23 have contained lists of cases for the period laid down, varying in number from 1 to 55. Of the 23 lists, 5 are from New South Wales, 10 from Victoria, 4 from South Australia, 3 from Queensland, and 1 from Tasmania. The names of the various places are:—

NEW SOUTH WALES.	VICTORIA.	SOUTH AUSTRALIA.	QUEENSLAND.	TASMANIA.
Sydney { Sydney .. 55 Cases Alfred .. 22 " Sick Children.. 1 " Newcastle .. 11 " Forbes .. 2 "	Melbourne { Melbourne 31 Cases Alfred .. 19 " Sandhurst .. 13 " Castlemaine .. 4 " Kyneton .. 5 " Hamilton .. 4 " Daylesford .. 3 " Ballarat .. 4 " Clunes .. 3 " Sale .. 3 "	Adelaide { Adelaide.. 23 Cases Children.. 22 " Kapunda .. 7 " Burra Burra.. 1 "	Maryborough 3 Cases Townsville .. 1 " Bundaberg .. 1 "	Hobart, 6 Cases.
Total .. 91	Total .. 89	Total .. 53	Total .. 4	Total, 6

By a reference to the map which forms the supplement to this month's journal, a ring will be seen to mark the situation of the places named; within the ring is the number of cases reported. A rough idea will thus be graphically obtained of the extent of the prevalence of the affection in Australia; this will serve the purposes of my paper.

So far as New South Wales is concerned, the disease may be considered to be endemic. I am inclined think that it is as common in the district of Newcastle as in any other part of this colony; for eleven cases operated upon in ten years—where the population has varied from under twenty thousand in the first of the decade to nearly sixty thousand in the last—is a proportion greater than occurs in any part of Great Britain other than "the stone districts."

From my investigations, I conclude that the disease is more common in the centre of Victoria than in any other part of Australia. By looking over the above list it can be seen that 36 cases are reported from Sandhurst, Castlemaine,

Kyneton, Daylesford, Castlemaine, and Clunes, which are situated in close proximity. The map has the positions of these cities, towns, and their neighbourhood, marked by a dotted shading.

In Kapunda, in South Australia, the number of calculus cases in regard to the population is large, as seven cases have been operated upon in the ten years, while the population of the town and district in 1886 was only 5,000. It would have pleased me to have had an answer from both the Brisbane Hospitals and from Launceston, but my enquiries have failed to elicit any reply giving a list of cases.

In the article "Calculus and other Urinary Disorders" in Hirsch's Handbook of Geographical and Historical Pathology, it is stated (Vol. III, p. 478, New Sydenham Soc. Ed., 1886): "Endemic centres of stone are often very definitely bounded, the malady being extremely rare all round about, although the climatic conditions are the same." In time it may be demonstrated there are certain areas—such as those above referred to—in the continent of Aus-

tralia, where the malady is of relatively frequent occurrence, bearing the same relation in this respect to this southern country, as Norfolk and Aberdeenshire do to Great Britain. Referring to the same work (p. 463), it is stated: "In Polynesia and in Australia urolithiasis counts amongst the very rare diseases. Among the natives of New Zealand, as we learn from Thompson (Brit. and For. Med. Chir. Rev. L.C.), not a single case of it has been seen." If this quotation have reference to the coloured peoples who formerly occupied the whole of the land, I am unprepared to join issue with it, but, if it refer to the white population, it is hardly consistent with fact. The Australian blacks, except in especial stations, rarely require skilled medical treatment, and it is doubtful if there exists any surgeon competent from long experience to give an opinion on this matter, if there be, many would be interested to hear what he has to say about it. The reference "natives of New Zealand" would lead one to believe that the first sentence also referred to natives—i.e., blacks. Previous to my attempt, I am not aware that any has been made to get information together bearing upon this subject, hence we should expect to find that the opinion held in foreign countries is a negative one.

In considering the prevalence of calculus in the relation to population: in New South Wales, with a population of one million souls in eighteen hundred and eighty-seven, there were seventeen cases reported, or a proportion of one to 58,823, nearly. In the Newcastle district during the past twelve months, three cases have been operated upon, giving a proportion of one to 20,000 of the inhabitants. The first computation is, I have little doubt, under the absolute facts of the case, as almost certainly there were some private operations, and others of which I have had no account. To be well within the mark, we may add three cases as not reported, when we have a total of twenty cases for the year, or one for every 50,000 of the people. In the county of Aberdeen in Scotland, where the disease is considered to be common; *idem* p. 470: "It is exceptionally common in Aberdeenshire; during ten years (1838-43 and 1867-71) 90 patients were operated on for stone in the Aberdeen Infirmary, or nine per annum; and if we assume that these came from the county generally, and estimate the population of the latter at 250,000, we get one case to 27,800 inhabitants." Thus, in New South Wales, the disease is more than half as prevalent as in the "stone district" of North Britain. Professor Anderson Stuart, at the Sydney University, has a collection of many varieties, in size and composition, of stones.

Making a similar computation for Victoria, 17 cases were reported for 1887; add to these five that I have not heard of and we have a proportion of 22 cases to a population of 1,012,000 souls, or a proportion of one to 46,000. When travelling in Victoria in April last, Dr. Hinchcliffe, of Sandhurst, showed me at least a dozen vesical stones that he had removed; doubtless other medical gentlemen, residing in the same locality, have some specimens. Hence, the addition of five to those of which I have heard, will be well within the mark.

For South Australia there were seven cases for a population of 325,000 in 1887, or a proportion of one to 46,428.

It would be useless to make a calculation for Queensland or Tasmania, as only from one leading Hospital, viz., Hobart, has my circular been answered.

On comparing these results with the proportion in Aberdeenshire, Scotland, we get:—

IN NEW SOUTH WALES.	IN VICTORIA.	IN S. AUSTRALIA.	IN ABERDEENSHIRE.
1 Case to 50,000 popul.	1 Case to 46,000 popul.	1 Case to 46,428 popul.	1 Case to 27,800 popul.

#### A CASE OF FOREIGN BODY IN THE TRACHEA FOR 52 DAYS.—TRACHEOTOMY—RECOVERY.

By H. SWIFT, B.A., M.D., CANTAB.

ON May 5th, 1885, Nancy C., *æt.* 3½ years, was admitted to the Children's Hospital, Great Ormond-street, suffering from dyspepsia. On the evening of the 7th of April, four weeks before admission, the child having previously been in good health, began to have difficulty in breathing, with a dry cough and some loss of voice. She was thought to have croup, and was treated accordingly with compresses, inhalation of steam, &c. In spite of the treatment and good nursing her condition did not improve, and the day before admission the symptoms were much more severe, and in the night she was very ill, having at times most urgent dyspnoea.

The mother, who was a most sensible woman, said she had nursed many children with "croup" and "diphtheria," but had never seen a patient in the same state; and in fact she was sure that the story which the child herself gave was the correct one, viz., that on the day in question a little brother had put a nutshell into her mouth, and she had swallowed (*sic*) it.

On admission, the child looked much distressed, breathing with considerable difficulty, and with

crowing inspiration; there was a frequent dry cough of a croupy character. The tongue was clean, the fauces were natural; the temperature was normal. Examination of the chest did not assist diagnosis, there being nothing abnormal except that the air did not enter the bases of both lungs as well as it should have done. There were no râles, no dulness. Examination of the throat was not very successful, owing to the restlessness of the child. The urine was clear, and there was no albumen. April 6th she had a fair night. April 7th she was not so well; looked pale and anxious; the lips were slightly dusky; there was much laryngeal stridor, with considerable recession of the ribs; R. 80, P. 112, small and feeble. In the afternoon she had a bad attack of coughing, lasting for some minutes, with marked stridor, expiratory as well as inspiratory. At times she could phrenate quite well, at others she was unable to do so. On the evening of the 8th, she had another prolonged fit of coughing lasting two hours almost without cessation. During this time I frequently listened at the side of the trachea, and thought I could hear something moving up and down the trachea with the expiratory and inspiratory efforts of coughing. At 7 p.m. on April 8th, as the child was getting rapidly weaker, Dr. Barlow asked Mr. Howard Marsh to see her with a view to tracheotomy. The operation was performed at once; the child was twice inverted and shaken, but without result. A feather and also a probe were passed upwards through the larynx, and also downwards into the trachea, but no foreign body could be detected, nor could any obstruction be distinguished. A silver tube (French shape) was inserted, and the child was placed in a tent-bed, with a steam spray playing into it. The operation gave great relief, and the child had a fair night. In the evening she was restless; her temperature rose to 100.6 F. Her pulse was 144, and she had a slight, ill-defined erythema on the arms and thighs. On the 10th she was removed to the scarlet fever ward, having all the symptoms of that disease well marked. On the 11th, an indiarubber tube was inserted in place of the silver one, which seemed to be irritating the wound. On 15th the tube was left out for four hours. On 16th the tube was again left out for the same time, having to be re-inserted at the end of that period owing to dyspnoea. General condition was fair. She was desquamating. On the 19th she was not so well, pale and languid; temp. 103. F.; urine pale, no albumen. On the 21st she vomited once; still looks low and weak. A silver tube had to be re-introduced, as the soft one, which had an eyelet cut in the convex side, had become too weak to allow of its being inserted with safety. On the

23rd the wound was looking unhealthy, with ragged sloughing edges, which completely hid the opening into the trachea. There was much cough when the tube was out, and considerable dyspnoea; a bi-valve silver tube was introduced after some trouble. On the 28th, as soon as the tube was taken out, she began to cough; and with a little more vigorous effort than usual a piece of nutshell was expelled through the wound. The nutshell was a third of an inch long, and nearly a third of an inch in widest part, with one very sharp point. This was followed by immediate and marked relief. The tube was re-inserted, as she was a good deal exhausted. On the 29th the tube was left out, and she at once began to breathe through the mouth, and also to cough into it. From this date she made rapid strides towards recovery, eating well and gaining strength and color. The wound quickly healed, and was entirely closed on the 31st. For a few days she had a considerable amount of mucous in the larynx; but this gradually subsided, and she was discharged quite well.

The chief point of interest is the length of time that the nutshell was retained in the trachea without giving rise to any serious complication, such as deep ulceration, abscess, collapse of lung, or pneumonia. The nutshell was drawn into the air passages on April 7th, and was expelled on May 29th; that is to say, it was in the trachea 52 days, and when the shape of the shell is observed it is remarkable so little damage was done. Another point of interest is the occurrence of the scarlet fever within 24 hours of the operation. It was then suggested that the laryngeal trouble was due to the exanthem, but the result proved otherwise.

West Terrace, Adelaide.

#### LUXATIO CAPITULI RADII, WITH SOME REMARKS AS TO ITS ETIOLOGY, DIAGNOSIS, AND TREATMENT.

By JOSEPH ROSS, M.D.,  
OF MACARTHUR, VICTORIA.

On the 8th September, A.C., a boy, about 4 years of age, was brought to me by his mother, who said his arm was broken. The only information I could obtain from her was to the effect that the child came into the house crying, saying his arm was broken. He was utterly unable to use it, the slightest movement, active as well as passive, giving pain. As there was no change the next day, the boy was brought to me.

When undressed the arm was found hanging down, slightly bent in the elbow, quite motion-

less, hand and forearm in a position seen in *fractura radii*, close to the hand.

The boy could not be induced to lift his arm, nor to move it in any way. The arm seemed useless, the child not daring to move it for fear of pain, every exhortation to move it being followed by crying.

My first impression was that I had a *fractura radii* before me, but on examination to that effect I found my mistake. My second thought was *luxatio humeri*, but this also, on careful examination, proved to be a mistake. Now, the recollection of a case of *luxatio capituli radii* which I had seen some years ago, struck me.

On examining the moving capacity of the elbow, *i.e.*, the excursion of the movements of forearm to the humerus, as well as those of the forearm, particularly those of the radius, I found that flexion and extension was greatly interfered with; supination and pronation were also found to be materially impeded. I was able to make those movements to a certain extent, but in every instance the child cried.

I tried to find out the dislocated capitulum, but found here, as in my former case, that I was unable to feel it owing to the roundness and fat of the arm. The circumstances explain the fact that there was no alteration whatever visible in the shape or form of the elbow.

My diagnosis was *luxatio capituli radii*, and was confirmed by the successful reduction, all movements being free at once, and without the slightest pain.

Before giving the method of reduction, I will relate the way this dislocation is brought about. In most cases it is caused by the child being lifted by the arm over a gutter or some obstacle or other. The nurse, in trying to lift the child, *e.g.* over a gutter, steps both forwards and more or less sideways. As the body of the child cannot follow the movements of its leader as quickly as would be necessary, it is jerked forward. As a natural consequence the arm is forced into hyper-supination, and at the same time is hyper-extended. The nurse, in holding the lower part of the arm instead of the hand, uses the arm as a lever, forearm and arm forming one. The body, acting as dead weight on the arm, forces it into hyper-extension. The ulna is prevented from getting dislocated by the olecranon, but the radius has not such help to keep it in its place. It slips out through a tear at the inner part of the capsule. The acting powers of this dislocation are hyper-supination, hyper-extension, and traction.

On coming to this conclusion I based my method of reduction as follows:—First, I brought the arm in the same position, as closely as possible as it was in when being dislocated, in order to

re-open the slit in the capsule and bring the capitulum close to it. Then I tried to force the capitulum through the slit by pressing it in the direction towards its socket, while causing pronation and flexion, the snapping sound, rather felt than heard, indicating the successful reposition. All movements of the arm become at once easy and free, without any pain.

My mode of reduction was as follows:—One hand of the surgeon takes firm hold of the arm, fore and middle finger on the place of the capitulum radii. The other hand grasps the patient's hand and wrist, placing the finger in the *palma manus*, the thumb on the *dorsum*. The thumb of the patient's hand is left free. Now the surgeon makes supination and extension to a rather forced degree, slightly pulling all this time. The reduction is then accomplished by pronation and flexion, while the surgeon tries to press the capitulum radii into the socket. As it is impossible to feel the capitulum radii, the fingers of the surgeon cover the space where it ought to be, so using a rather indirect force upon it. He then satisfies himself that all movements are free and painless. A bandage is worn for about three weeks.

The above-mentioned boy was brought to me within 10 days after, owing to circumstances. I found him able to have the free use of his arm, no trace of an injury whatever left. As the mother had removed the bandage the same morning, I ordered a flannel bandage to be worn for a fortnight.

I know there are many other incidents that might give rise to a *luxatio capituli radii*. I treated a case in point, but a careful investigation into the circumstances will show that the mechanism that caused the said luxation is the same in principle.

In conclusion I wish to remark that the main feature of this luxation is the utter impossibility of freely using the arm; and the unrestrained use of it immediately after reduction is performed.

P.S.—Since writing the above, I came quite by chance across a paper written by Professor Petersen in No. 15 of *The Central Gazette of Surgery*, Leipzig, April 15, 1888. Professor Petersen attributes the frequent occurrence of *luxatio* or *subluxatio radii* in children to the almost universal possibility of hyperextending the humero-radial joint, not only passive, but active also. The same is said to be the case in persons with weak and feeble muscular power, especially women. This physiological, or rather anatomical, laxity of the joint under consideration explains readily the occasioning of luxation of the capituli radii by hyperextension and hypersupination, instead of *fractura olecrani*.

Macarthur, Victoria, 2nd December, 1888.

## THE WHIPWORM AS A PROBABLE CAUSE OF DYSENTERY.

READ BEFORE THE MEDICAL SOCIETY OF QUEENSLAND.

By JAMES B. HOGG, L.R.C.P. ET R.C.S. ED.,  
ASSISTANT MEDICAL SUPERINTENDENT  
WOOGAROO LUNATIC ASYLUM, GOODNA.

THE Whipworm, of which I herewith produce specimens, is named from its obvious resemblance to a whip. Its scientific name is the *Tricocephalus dispar*.

It inhabits the cæcum and colon. The worm fastens itself to the mucous membrane by imbedding or boring into it with the point of its hair-like process—(lash of the whip in fact). The rest of the worm floats free in the intestinal contents. (See the specimens.)

This worm has been found very widely distributed in patients of all ages all over the globe.

Some authors make out that it is a very common parasite indeed, *e.g.*, Zenker found them in 11·11 per cent. of all his Erlangen *P.M.'s*. and in 2·5 per cent. of all his Dresden *P.M.'s*. Heller found them in 30 per cent. of all his *P.M.'s*. at Kiel, while "Davaine says half the Parisians are infested by it." (Cobbold.)

"Clinically", says Cobbold, "its importance by no means corresponds with its prevalence, nevertheless in rare instances it has been known to occasion severe symptoms." He mentions one case of "palsy with loss of speech," and another of "death with cerebral symptoms in a four-year-old child," which were ascribed to them.

"It is worthy of remark," he winds up, "that in animals the presence of a closely allied species, *T. Affinis*, has been known to produce severe intestinal irritation."

From the above it is evident that the worm is believed clinically not to be of much account.

But I think there is something to be said on the other side.

In the *Berliner Klinische Wochenschrift*, No. 37, 1886, Dr. Erni, of Batavia, says he believes that curious disease, *Beri Beri*, to be a secondary anemia due to loss of blood produced by intestinal parasites, *e.g.*, *Ankylostomum Duodenale* and *Tricocephalus Dispar*. The *Tricocephalus* was far more frequently found in the intestines of subjects of *Beri Beri* than any other parasite, but one or other of the above was rarely absent in more than fifty cases examined, while they were rarely found in other diseases. The *Tricocephalus*, he says,

inhabits the cæcum, and may occur in large numbers. In the slighter cases there is localised inflammation of the cæcum and neighbouring parts of the colon; in others there are definite erosions and points of hæmorrhage which have been produced by the worm; while in others again the mucous membrane is even undermined by the parasite. Hence the cases are characterised more or less by intense symptoms of enteritis.

So says Dr. Erni; but the *Lancet*, from which I have quoted this, sits heavily on him as follows: "It is hardly conceivable that a parasite which is harmless in Europe should be capable of producing such grave intestinal lesions in the East Indies."

Now, gentlemen, I fancy that the *Lancet* is wrong, and I appeal to the specimens I lay before you now, and the histories of four cases in which I found these worms *post mortem*.

The first case in which I found the worm was that of C.H., a woman aged 89, an asylum inmate of eight years' standing, who died June 18, 1885, after a week's illness from uncontrollable diarrhoea. She was quite demented, and had probably been suffering longer without making any complaint. "The colon was found, *P.M.*, to be a mass of stringy grey and black tatters from the valve to 4 or 5 inches from the anus, where there were many ulcers. In the cæcum were very many of these worms adherent to the remains of the mucous membrane, and hundreds were washed out of the colon in cleaning it." I handed a bottle with a number of these to Dr. Bancroft at an early meeting of this society.

My next case was that of a very strong female lunatic, M.C., aged about 43, who took to her bed in January, 1888, with a feverish attack, without apparent physical lesion to account for it. Gradually intractable diarrhoea set in. She died on March 2, 1888. *Post mortem*.—"The colon was found to contain great numbers of whipworms, and its mucous membrane showed numerous small ulcers."

The third case was a hemiplegic epileptic man of 80, J.B., who had lived in the asylum for 15 years. On the 25th July, 1888, he was found to have pneumonia, and also to have very watery loose motions running away from him. He was given injections of Tr. Catechu and he passed thereafter a large quantity of whipworms. He died on the night of the 26th July. I have a part of the colon here and it will speak for itself more eloquently than any description.

The fourth case is that of a man of 45, W.J.S., and an asylum resident of 22 years' standing. In June, 1886, he began to suffer from chronic dysentery, the motions being watery, stinking

brownish and containing shreds of mucous membrane, and along with this he had prolapsus recti severely. He recovered in about six weeks. Latterly he became anæmic, with puffy eyelids. In the middle of August he began to suffer from bleeding from the rectum, with prolapsus. On 25th August he was found to be passing pinkish stained clear, starch-like fluid. In fact it was running from him. This continued in spite of all treatment, and he died on 30th August. *Post mortem*.—Hundreds of whipworms were washed out of the colon, and a few were found adherent to the mucous membrane, as I now show you.

Now in these four cases there is no doubt of the association of the whipworm and a form of dysentery or ulceration of the colon. It is of course open to any one to say it is a mere coincidence. For my part I can't help thinking that there is a causal connection between the two. I readily admit that all persons suffering from whipworm don't necessarily suffer from ulceration of the bowel, but I think a certain number do. A week or two ago a young lad who suffers from dementia and syphilitic paraplegia, and who only arrived in Queensland from Dublin in 1885, "passed thousands of them." The attendant who saw them did not keep any, as he had seen them at P.M.'s. I don't think he would be mistaken. A large injection containing turpentine failed to bring away any more. At the time he was having mercuric inunctions and iodide by the mouth. The lad showed no symptoms of any bowel irritation.

#### *How shall we recognise their presence?*

There are only two cases in which the worm has been seen here *ante mortem*. It appears to retain its grip of the bowel very firmly, only relaxing its hold at death. When seen *post mortem* the worms are quiescent, and apparently dead.

The eggs are minute, slightly brownish, oval bodies, with a small glistening knob at each end, and containing a finely granular yolk. They have been compared to lemons. But searching for the eggs in the *fæces* is not likely to be often resorted to.

#### *As regards Treatment.*

Injections of Tr. Catechu seemed to bring them away. Turpentine enemata had no effect.

Heller says that *santonin* in contact with living *trichocephali*, has no effect upon them.

There is evident room for experiment in this direction.

On the whole I think we are justified in believing that in a certain number of cases the presence of vast numbers of these worms is a cause of intestinal irritation which may pass on to ulceration (allied to that of dysentery), and cause death.

## A CASE OF PERSISTENT PRIAPISM.

By W. H. CRAIG, L.R.C.P. LOND.,  
M.B.C.S. ENG.

PERSISTENT priapism is a condition of such rare occurrence that I consider the following case, which occurred in my practice last year, is worthy of publication.

The patient, aged 54, was a man of very intemperate habits whom I had attended on two or three previous occasions for slight attacks of delirium and enlargement of the liver. With these exceptions I believe he had enjoyed good health.

On June 28, 1887, he considered he sprained his right ankle through tripping on a stone in the street. When I was called in on the following day I found the foot below the external malleolus and along the outer side of the dorsum swollen, with the skin red and exquisitely tender. The appearance was more that of a gouty inflammation than of a sprain, and in support of this view was the fact that during the following day the other foot became similarly affected. During the night of July 1, after an attack from pain in one groin, his penis became very painful and passed into a state of persistent erection, so that when I saw him on July 2, the erection was complete and the organ was extremely tender to the touch, the skin covering its right side being red and swollen. The patient described the pain as being identical in character with what he had felt in the feet, which had now become easier, although the feet were still swollen.

His T. was 100° F., P. 84. Throughout his illness the T. ranged from 94.4° to 101.4° F., and the P. from 84 to 90, being at times very feeble. There was from the first very great pain and straining during micturition. The urine was free from albumen. The testicles were small, and the scrotum flaccid. There was no enlargement of the prostate gland, but there were the remains of two or three external piles, from which the patient had been a great sufferer in years past.

During the first week of his illness, considerable swelling of the prepuce and of the skin covering the body of the organ took place, the right side being rather larger than the left. This swelling was at its worst on July 7, at which time there was also a sense of deep fluctuation on the right side, as if in the corpus cavernosum; and about this time he had two or three rigors, so that I feared suppuration was about to take place. But from this time the

œdema began to subside, and on the 12th July the following was the state of affairs :

"The penis is still in a state of erection, but the œdema of the skin and prepuce has completely disappeared. The corpora cavernosa and crura penis are perfectly rigid right back to the rami of the pubes ; the glans penis and corpus spongiosum are not nearly so rigid as the corpora cavernosa. There is no sexual desire nor has there been since the priapism began. The patient used to be a man of strong sexual appetite, but for the last six months there has been an almost entire absence, at all events at home."

On July 15, Dr. Sydney Jones saw the patient with me, when the state of erection continued the same. Dr. Jones found that the knee jerk was diminished on the right side, and that there was some ankle clonus on either side.

Towards the end of July the rigidity began to get less marked, although the organ still remained in a state of erection. On July 29 I noted, "The penis, although still enlarged, is certainly not so rigid, and the perineal portions of corpora cavernosa feel much softer."

On August 1 the left pupil was larger than the right, but this inequality only lasted a short time, as on the following I have noted that, "the pupils were small but equal, and that there was a decided improvement in the knee jerk." On this day he had severe shooting pains in both heels, but unattended by any redness or swelling.

I saw the patient for the last time on August 7, when the penis, although fairly flaccid, was still much larger than natural. During the latter part of his illness the patient suffered from various delusions and hallucinations. He was naturally a man of violent temper and very self-willed, and as soon as he was able to leave his bed insisted on going out, saying he was going to his business, but only made his way to the nearest public-house.

This case accords with most of the published cases of "persistent priapism" in its main features, viz., as regards pain, absence of sexual desire, and the absence of complete rigidity in the glans penis and corpus spongiosum ; but the great œdema of the skin and prepuce I cannot find recorded in any other case. At first I regarded the condition as due to a gouty inflammation ; the history of the onset and the appearance of the parts were strongly in favour of this view ; but later I inclined to the view that it was due to some degenerative change in the cord, as the state of perfect erection of corpora cavernosa remained long after all appearance of local inflammation had subsided, and there was an entire absence of any "nodular deposit"

generally noticed in cases of gout affecting the corpora cavernosa.

The treatment at first consisted in pot. iod., T. colch. et sod. tart. internally, with lead and opium locally, followed by ung. hydrarg. c. ext. bellad. When the rigors set in quinine was given, and afterwards bromide of potassium in full doses was tried. For the relief of pain Dover's powders, morphia and belladonna suppositories, urethan, morphia draughts, and the hypodermic injection of morphia were successively tried, none of them having any effect in producing sleep and very little effect on the pain. I cannot say that the least benefit was derived from any of the drugs used. On one occasion when the bromide was pushed, the nails became livid and the pulse very feeble without producing the least noticeable effect on the priapism. On two or three occasions I passed a soft catheter to draw off the urine, but its passage caused considerable pain. Patient persisted in taking brandy during his illness, which doubtless aggravated it.

"Erichsen" considers potass. bromid. a specific. In the *Lancet* of April 14, 1888, a case is published by Mr. Hulke which had been under his care in the Middlesex Hospital, where, after the failure of bromide and of tartar emetic, &c., ice speedily reduced the state of erection. Mr. Hulke draws attention to the fact that most cases of priapism are followed by "impotency." In the case here recorded patient and his wife have never occupied the same bed since his illness, but as he has never made any overtures to her it is probable that a state of impotency exists. I learn that he continues his intemperate habits. I have recently seen him walking in the street without the least sign of paraplegia.

A case is also mentioned in "Holmes' System" as having been in Guy's Hospital under Mr. Birkett for five months, in which he made incisions into the corpora cavernosa to ease the intense pain, but that was a practice he would not again adopt on account of the protracted suppuration.

In the case here recorded the priapism came on when the man had not been out of the house for two days, and there had been no attempt at coitus at home, so there could have been no injury to the penis from that cause. The pain was exquisite for at least four weeks, about which time the true priapism lasted—the least movement of the bed-clothes causing him to call out ; and as the organ became more flaccid the pain subsided. In the priapism due to spinal injuries the organ is seldom rigid, and pain is not usually present to any great extent.

82 William St., Sydney, November, 1888.



## OPHTHALMIC CASES.

By T. K. HAMILTON, M.D., F.R.C.S.I.,  
LAURA, SOUTH AUSTRALIA.

## (1) ACUTE HEMERALOPIA WITH AMBLYOPIA.

W.R., aged 31. Boundary-rider on a station; a man of nervous temperament, but good physical development—has been engaged in the same country (some 500 miles north) and at the same work for the past 8 years. Five months ago got a very bad fright; a horse bolted with him and threw him off. On getting up he noticed, for the first time, sparks before the eyes, and soon after he saw cobweb-like specks frequently, and these were always more troublesome after he had been riding much in the strong sunlight. Three months subsequently his vision began to get bad at night, and soon became so defective that he could not see a foot before him, had to be led about, and he was afraid to go out after dark as he knocked up against things. Smokes heavily—"twist" tobacco—as much as one ounce a day—and since he became blind at night he has been in the habit of lying down and smoking all evening to pass the time away, thereby getting through more tobacco even than his usual allowance. Does not drink, except when he comes down country, which is very seldom.

Has been living on salt mutton, and drinking brackish water for some time past, which has made him feel weak and low, and one of his mates has recently gone to the hospital suffering from scurvy.

Oct. 18th.—On examination, nothing wrong with lids or exterior of the eyes. Pupils normal.

Vision.—R.  $\frac{2}{15}$ , not improved by glasses, and J.1 at 22 c.m. L.  $\frac{2}{5}$ , not improved by glasses ?? and J.1 at 22 c.m.

Fundus.—R. disc not quite oval; a slight diverticulum of upper and inner margin—otherwise normal. L. normal, with two very large patches of opaque nerve fibres on upper and inner and lower and outer margins, and occupying fully one-half of the disc.

Refraction.—Emmetropic.

Colour Vision.—Normal.

Fields.—Very marked contraction of the boundary for green on the outer side; instead of reaching to between 70° and 80°, it only reaches to 30° in each eye. The other colours were perceived up to their normal limits when the object was kept moving, but when motionless they were not so well made out, showing a condition of retina easily wearied. No central scotomata. Five minims of nitrite of amyl given to inhale, and put on nourishing diet.

Oct. 19.—Reports that he saw the stars last

night for the first time for two months past. Amyl nitrite given in two consecutive inhalations of 8 minims each, and when just recovering from the effects: Vision and fields taken—V.—R.  $\frac{2}{5}$ ? L.  $\frac{2}{5}$  (with some difficulty).

Fields.—For all colors, including green, quite normal, and retina seems more sensitive and not easily tired. No perceptible change noticed in size of the vessels on the fundus after the inhalations. He had a second inhalation this day, two consecutive doses of 8 minims.

Oct. 20.—Sight much better last night; could see small objects. V. (before any amyl nitrite inhaled)—R.  $\frac{2}{5}$ ? L.  $\frac{2}{5}$  (easily). Three inhalations to-day from 8 to 12 minims, given in two consecutive doses as before.

Oct. 21.—Can now see everything in the dark. Two inhalations as before.

Oct. 22.—One inhalation of 15 minims.

Oct. 23.—One inhalation of 15 minims.

Oct. 24.—One inhalation of 16 minims. The dose has been gradually increased, as it seemed to require more to produce its physiological effects.

Oct. 31.—Vision now quite normal,  $\frac{2}{5}$  both eyes, and can see everything at night. Fields both normal. He has had the constant current applied to the eyes twice, and is now going home. Ordered: To wear neutral-tint glasses when exposed to strong sun, and to drink good water, eat good food; smoke only a limited quantity.

The points of interest in this case are:

1st. The etiology of the attacks of hemeralopia (so called "acute" or "idiopathic" to distinguish them from those occurring with pigmentary changes in the retina), as illustrated by the onset in this man, in whom mal-nutrition from bad food and water acted as the predisposing, and prolonged exposure to strong sunlight as the existing cause. I am not sure that such attacks are often noticed amongst bushmen on other stations. They are usually a hardy and tough lot of men, inured to hardship and privation on the one hand, and enjoying usually robust health from the outdoor and otherwise healthy lives they lead on the other. I have not come across a similar case in this colony, and I think they must be rare. Hemeralopia, which is due to a functional derangement causing torpor or defective adaptive power of the retina, is a specially interesting condition now that the "light-sense," as one of the three visual retinal perceptions is so much talked about. Some authorities state that all the functions of sight, those of space, colour, and light, are pathologically diminished in hemeralopia; but Swanzy\* asserts that this is due to the

\* Handbook of Diseases of the Eye, 2nd Ed., pp. 15 and 369. (This book may be obtained from Mr. Bruck, Medical Publisher, Sydney.)

confounding of the "light-sense" and the adaptation of the retina, and that hemeralopia is distinctly and essentially a want of adaptative power as distinguished from a deficiency of the light-sense, and that it is quite possible for the one to be normal while the other be very defective.

2nd. The co-existence of some amblyopia with the hemeralopia. I think this is a very unusual occurrence. That he was distinctly amblyopin is clear, for his vision for distance was purposely tested during clear and strong sunlight, and not when there was any dulness around. The question arises, was this "Toxic" or not? Against the toxic idea we have the absence of central scotomata—of any changes in the fundus, and of defective near vision, the rapid improvement by inhalation of amyl nitrite, and the fact that he was not a "drinking" man. I mention this because I have yet to see the case of so-called tobacco amblyopia in which alcohol consumption did not play some part. Such cases I know occur, but I was struck in listening last year to the discussion before the Ophthalmological Society in London, with what unanimity all those present supported this view, and held that this is really, as a matter of clinical experience, almost always a tobacco-alcohol-amblyopia. I scarcely think the amblyopia in this case can be put down to tobacco; but it is more likely to depend on the same cause as the hemeralopia, viz., deficient nutrition of the retina, and this brings me to the last point of interest I would notice.

3rd. The immediate and beneficial results by inhalation of nitrite of amyl.—I believe Swanzy was the first to use this drug for the treatment of amblyopia. He has recorded some of his first cases,† and amongst them there is a case similar in kind, though in it a greater degree of amblyopia present to the one under consideration, and the amblyopia in his case seemed to have been brought on by the individual staring on a wall, which he was engaged in whitewashing, for some time in a strong sunlight. He had concentric contraction of part of his fields, especially field for green, and I myself have observed two cases lately of amblyopia—one "reflex" (from the nose), and the other "hysterical," in which there was a concentric-green field contraction, and marked improvement immediately followed on the inhalation of nitrite of amyl. I take it there must be an anæmic or ill-nourished condition of certain parts of the retina, accompanied by or causing anaesthesia, and that the amyl nitrite, by lowering arterial tension and increasing the action of the heart, brings about a vascular reaction, and this causes immediate improvement in vision. This

is borne out by the experiment of Deutschmann† and Samelsohn,‡ who found hyperæmia of the papilla occur simultaneously with the usual hyperæmia of the face after the inhalation, and this was followed by improvement in vision. In all cases in which I have used the amyl up to the present, I have failed to discover any apparent change in the size of the retinal vessels, though the increased sensibility of the retina has been undoubted.

## (2) A CASE OF CONJUGATE PARALYSIS.

E.C., aged 7½ years, the youngest of a healthy family of 18; mother had one miscarriage; six still living; all the others died under six months; two soon after birth—one of convulsions; no history of hereditary syphilis. Twelve months ago this lad fell very violently on a hard floor (cement), and got a bruise sufficient to leave an indentation of the frontal bone over the left orbit.

During the interval between this occurrence and three weeks ago he seemed quite well; he then began to turn his eyes upwards and to the right, and his head turned to the same side. He would awaken, crying out of sleep, complained a little of headache, irregular muscular twitchings came on, and tendency to constipation, with occasional vomiting. Second dentition going on; he has three incisors up.

Aug. 28.—Well-grown and developed lad for his age; fairly lively and intelligent; no complaint of headache to-day; head feels hot; no epistaxis; stands with head slightly forward and rotated to right, and eyes both turned upwards in the same direction. Gait very unsteady; legs seem to overlap each other, and occasionally he falls.

*Eyes: Right.*—Ptosis; pupil does not act so well to sight as to convergence; tension, +1. V =  $\frac{1}{15}$ , not improved by glasses; J.1 at 22 c.m.; refraction, +2; fundus, normal, no photophobia.

*Left.*—Pupil acts well; V =  $\frac{1}{15}$ , not improved by glasses; J.1 at 22 c.m.; refraction +2D; tension, normal; fundus, disc slightly paler than right, and veins somewhat more full; no photophobia.

The deviation of the eyes, registered by Bowman's method, shows that he can turn the right outwards until outer margin of cornea corresponds to the limit of outer canthus, while the extreme limit of the left in the outward direction is 6 m.m. from the outer canthus; the centre of right pupil is 2 m.m. more to right of puncture than left.

*Nasal Cavities.*—Both inferior turbinated

† On the treatment of Amblyopia, Dublin *Journal of Medical Science*, January, 1877.

‡ Graefe's Archiv: Band xxvii., Heft I.

‡ Centralb. für Prakt. Augenh., July, 1881.

nearly touch the septum ; no fresh nasal growth.  
*Ears.*—Normal, and H.D. good.

Tongue fairly clean, and appetite fair. To be kept in bed in darkened room ; put on bromide and iodide of potassium, and a purgative dose of calomel given.

Sept. 10.—Sleeps pretty well ; not drowsy by day ; pain comes on often in head ; seems to commence in frontal region, and extend all over the head. For two days since last note he complained of pain in and below both ears, just about where the facial nerve comes out ; this spot was very tender to the touch, and the pain extended from it along the face. This was accompanied by so much deafness on both sides that he could not hear the clock ticking ; these symptoms have all now disappeared ; has vomited nearly every day, and bowels always confined.

*Present Condition* (Sept. 10).—Head still more turned to right ; movements of the body and gait about the same ; the twitchings are as bad one side as the other, and no distinct motor paralysis ; patellar reflexes normal. He is still quite as intelligent and lively as before, but physically weaker ; they cannot trust him alone, he falls about so ; puts his tongue out as if too much to left side, and angle of right side of mouth droops enough to allow of dribbling of saliva ; this being due to some paralysis of right facial ; pain in head comes on as before ; ptosis now both sides, but much more marked on right than left side, the lid covering half the pupil in the former, and only just coming to the top of the pupil in the latter. Corneæ both perceptibly anæsthetic ; pupils both contract badly to light ; apparently well, and equally to convergence. Fundus both as before, except slight indistinctness of margin of left disc. Vision—R.,  $\frac{1}{8}$  ??? ; L.,  $\frac{1}{8}$  ??

Registration of deviation of eyes, according to Bowman's method, shows :—

*Right.*—External movement slightly more limited than before, and the internal limit is centre of pupil, 6.5 m.m. exterior to the puncture.

*Left.*—External movement 9 m.m. from canthus, and the internal limit about 1 m.m. to outer side of puncture, while he can converge well and equally with both eyes until centre of pupils come to within 3.5 m.m. of puncta. No photophobia or vascularity of eyeballs.

*Ears.*—H.D., apparently good ; low voice at 8 metres and tuning fork heard equally well both sides ; articulation not so distinct as it was ; velum and pharynx both anæsthetic ; velum acts on deep inspiration, but it requires a considerable stimulus to posterior wall to cause a reflex contraction. Senses of smell and taste normal.

As the patient lived some 30 miles distant, no

opportunity was after this date afforded of examining him, nor of making an examination of his body after death, which took place on Oct. 23rd. He became gradually weaker, and died apparently of exhaustion, induced by constant pain, vomiting, and defective nutrition.

The points of interest in this case are :—

1. The peculiar general twitching movements of the body, which were choreiform in character, and the absence of any distinct unilateral paralysis, the only attempt at this being the facial paralysis of right side. This seems to make it more difficult to determine what the position and nature of the intercranial lesion was. That the porus was engaged is, I think, apparent, but was the lesion "destructive" or "irritative?" All the symptoms taken together, along with the fact of an injury to left side of skull, would, as far as I can see, point to a destructive lesion in left side of porus, the eyes being drawn towards the paralysed side. The "conjugate" nature of this paralysis is now very clearly accounted for by the demonstration of the existence of fibres called "posterior longitudinal bands," passing from the nucleus of 6th nerve and joining with the fibres of the 3rd nerve of the opposite side. This interesting connection Swanzy makes very clear by a diagram. §

2. The number of cranial nerves engaged.

i. Second—As shown by the optic neuritis on left side, and reduction of visual activity in both eyes.

ii. Third—Conjugate paralysis and sluggish pupils.

iii. Fifth—(a) Ophthalmic—through the Lenticular Ganglion—anæsthesia of cornea.

(b) Superior maxillary—thus Meckel's Ganglion—paralysis of soft palate and lavator-palati and anæsthesia of pharynx.

(c) Inferior maxillary—through Otic Ganglion—paralysis of tensor-palati, and possibly tensor-tympani.

iv. Sixth—As part of the conjugate paralysis.

v. Seventh—Paralysis of right facial muscles.

The incompleteness and partial character of the paralysis connected with these nerves strikes one, on looking over the symptoms, and that seems to form a prominent clinical feature of such cases. The deafness and pain in the ears, which came on and disappeared in a few days, would appear connected more with the middle than the internal ear, probably the passing paralysis of the principal muscle supplying the eustachian tubes with motor power—the tensor-palati, and with it

the tensor-tympani; also, both muscles having the same nervous supply. The complete disappearance of the deafness, and the normal response to the tuning fork vibrations some days afterwards, would be against the idea that the portio mollis were affected; besides, other branches of the fifth were involved in the immediate neighbourhood, *e.g.*, those supplying the soft palate and pharynx.

3. The power of convergence of the visual axes unimpaired. Gräfe (Halle) read a paper at the recent Ophthalmological Congress in Heidelberg\* on "The Action of Internal Rectus in Associated Movements and in Accommodative Movements of Convergence," and stated that he thought there was a distinct nervous centre for the production of each, and this idea is strengthened by the clinical fact under consideration in this case. Landolt also has reported cases of tabes in which there was abolition of convergence with normal associated lateral movements.

4. Contraction of pupils defective to light, but normal to convergence. That the pupil contracting centre is excited by the effort of accommodation, or more correctly by the convergence necessary for accommodation, as well as by the stimulus of light, is well known, and in a case like this it is all the more interesting to notice it, inasmuch as the power of convergence with which this contraction is more intimately connected than with accommodation, and with which it is more or less proportional, remains intact (as mentioned above), while other associated movements are lost or impaired.

### (3) MYOPIA WITH SPASM OF ACCOMMODATION.

H.M., aged 23 years, a weakly, cachectic girl with a phthisical history and tendency, came under observation Aug. 31 last, complaining principally of constant tinnitus aurium, also of cough, hoarseness, and general debility. It was further discovered that her eyes have been troubling her a good deal of late, giving her pain when she used them for close work of any kind. She has had a great deal of anxiety for past two years, owing to three deaths in her family, two of these from phthisis.

Aug. 31.—On examination into history of her sight, it is found that she has always been near-sighted, but getting more so for past two years. She finds when she sews or reads for any time her eyes ache and get tired. V. — R.  $\frac{4}{15}$  with — 5.5 D.  $\frac{1}{15}$  ??? L.  $\frac{2.5}{15}$  with — 4.5 D.  $\frac{1}{15}$  ??? Refraction (erect image) between 4.5 D. and 5.5 D. no astigmatism.

Fundus.—Nearly normal; very small "cres-

cents" each eye; insufficiency of internal recti, easily elicited by the ordinary finger test, but not found by Gräfe's or Landolt's tests.

For the next three weeks she remained under daily treatment for her other troubles, and nothing was done for the eyes, as the former seemed to demand most attention, and to be largely the cause of her eye symptoms. A detailed examination was made, and the following condition recorded.

Nose.—Inf. turbinated in both nostrils atrophic, and post. wall of pharynx too easily seen from anterior.

Naso-pharynx.—Nasal bones slightly atrophic.

Pharynx.—Normal, but pale.

Larynx.—Arytenoids both thickened and enlarged; some thickening also of inter-arytenoid; space vocal cords rather red; R. not so movable as L., and trachea slightly infected.

Ears.—Hearing good; ears normal, but constant tinnitus; nothing discovered in chest symptoms, etc.

Hoarseness; cough worse in mornings, and occasionally accompanied by sickness; pain under left shoulder, and shortness of breath; tongue, flabby and indented; appetite, variable (anæmic); menstruation regular. Morning: pulse, 76; temp., normal. The treatment during these three weeks was daily intra-laryngeal injection of menthol by Rosenberg's† method. Bromide of potassium was tried for the tinnitus, but given up for the continuous current treatment as recommended by Althaus,‡ and this was continued daily, by Julius Althaus, M.D. regularly, giving at any rate temporary relief to the noise.

Sept. 18.—V. — R.  $\frac{2}{15}$  c-5.5D.  $\frac{1}{15}$  J. 1. at 17.5 c.m. L.  $\frac{2}{15}$  c-4.5D.  $\frac{1}{15}$  J. 1. at 20 c.m. Glasses with R. — 2D. and L. — 1D. ordered—with these her far points to 22 c.m. in each eye, and she can see with them comfortably without any aching or pain. To go home and use inhalations of nitrite of amyl (5-6 drops) twice daily for the tinnitus, and syr: hypophosphites comp. 3i. ter in die in cyath. aquæ.

Nov. 12.—Returned saying she could not wear her glasses now. They suited her splendidly when she first got them, but now they make her eyes ache, and make the print so much smaller, she can see better and more comfortably without them. Her general condition is much improved since last visit—much better colour, feels stronger, appetite better, cough gone, and tinnitus less; for the latter she has found the amyl nitrite do much good.

† Zur Behandlung der Kehlkopf und Lungen Tuberculose, von Rosenberg (Berlin).

‡ "Tinnitus Aurium and its Treatment by Electricity," by Julius Althaus, M.D.

V. - R.  $\frac{5}{36}$  c-4.5D.  $\frac{1}{18}$  } J.I. at 20 c.m.

L.  $\frac{5}{36}$  c-3.5D.  $\frac{1}{18}$  ? } J.I. at 22 c.m.

No glasses at present, but to continue the general treatment as before.

Nov. 22.—Patient not so well as on last visit, owing to the depressing effects of the very hot weather. This is shown by her vision record.

V. - R.  $\frac{5}{36}$  c-4.5D.  $\frac{1}{18}$  } J.I. at 16 c.m.

L.  $\frac{5}{36}$  c-3.5D.  $\frac{1}{18}$  ????  
c-4.5D.  $\frac{1}{18}$  ?? J.I. at 17.5 c.m.

Her headache has troubled her more since this very hot weather set in, and she always finds relief from the amyl nitrite inhalation, and as the vision is always worse when she has much headache, the trial of the amyl for her vision was suggested. After she had inhaled two consecutive doses of this drug, and recovered from its immediate effects her vision was again tested sufficiently and found: V. - R.  $\frac{5}{36}$  c-4.5D.  $\frac{1}{18}$  J.I. at 22 c.m. L.  $\frac{5}{36}$  c-3.5D.  $\frac{1}{18}$  ?? J.I. at 30 c.m.

On a former occasion I failed to bring out insufficiency of the internal recti by Gräfe's and Landolt's tests. These were now repeated. Noyes' modification of Gräfe's test† was adopted, and the measure of insufficiency was found to be that of a prism of 3°. By Landolt's method ( $a^{\circ} - p^{\circ} - r^{\circ}$ ), her amount of divergence was found to be 5 metre angles. Full correction ordered in glasses to be constantly worn; continues the Fellows syrup and the inhalation of amyl nitrite.

The points of interest in the case are:—1. The "spasm of accommodation," the myopia and its disappearing after a few weeks' use of amyl nitrite combined with tonic treatment. Spasm of accommodation one is not so much in the habit of thinking of in myopia as we constantly seem to do in hypermetropia, and hence in the ordinary subjective examination we may lose sight of it, and forget that it is of common enough occurrence. When we have estimated the refraction and found the degree of myopia present, and have, by the usual method of Donders, made the necessary calculations, removing the far point to a given distance, according to what the patient requires his vision most for, we feel pretty well satisfied that our conclusion must be correct. And so they would be if we always based our calculations on the accurate estimation of the myopia found by an objective method. But I think we are sometimes apt to get at the amount of myopia subjectively and calculate from that. The case under consideration illustrates the fallacy of such when ciliary spasm is present. That the spasm of accommodation was here due to some constitutional defect

seems to be proved by the good result of treatment. The patient had been ailing and reduced in health by mental anxiety for two years, during which time her myopia had increased, but not apparently from any increase of antero-posterior or structural change of the eyeball, as there is now little or no such change existing, but clearly from an increase of refractory power due to the ciliary spasm. The usual symptoms of spasm with combined insufficiency of the interni came on, *e.g.*, headache, pain, etc., and these yielded very quickly to treatment with nitrite of amyl. This probably acted by increasing the vascular supply and nutrition, and thus removing a local anæmic condition which was the cause of the morbid irritability taking the shape of spasm. That the improvement in vision and comfort in sewing was maintained by the raising of the general tone seems to be proved by the return of the headache, etc., as soon as she began to get down below par again, from excessive heat despite the regular use of the amyl. The family history and symptoms, as recorded above, all point to a feeble constitution and want of vigour. Amongst the latter may be mentioned the cough—one not to tubercular but to simple catarrhal laryngitis, secondary to a condition of atrophic rhinitis—a sure index of defective nutrition. 2. The difficulty in demonstrating the insufficiency of the interni by Gräfe's and Landolt's methods. Noyes has pointed out that in the former test the patient is encouraged by the presence of the black line to make efforts at fusion, and he prefers to use a white dot on a blackened cardboard with a slight notch cut in the upper and lower edge vertical with the dot to mark its perpendicular. This, I found, brings out the defect readily, and the amount of insufficiency was soon arrived at. By Landolt's test I failed at first to bring out the amount of divergence, but subsequently, by careful examination, succeeded. This, and all other tests for muscular deficiencies, require patience and often a repetition on different occasions to arrive at a correct conclusion. 3. Nearly full correction ordered for constant use. This, I expect, will fulfil all the indications. Förster believes that the accommodation has nothing directly to do with the increase of myopia, but that is chiefly due to the act of convergence. Accordingly he advises the wearing of the fully correcting glass, in order that the patient may be induced to hold objects far away from her eyes, and thus use less convergence. In this case less convergence will mean less straining of the weak interni, which will go towards making up for the extra accommodation required, which probably removes a source of irritation, reflex or other, which may be a strong element in the causation

† "Diseases of the Eye," p. 88

of the ciliary spasm. It would seem quite safe in the present case, even if accommodative effort were a dangerous element in myopia (which Landolt and the French school believe), to let the patient use her accommodation freely; because she has not a high degree of myopia, her eye is organically sound, and, at her age, is likely to remain so, and she has an exceptionally good amplitude of accommodation for a myopia. Dr. Barrett (Melbourne), in a paper on the subject, has reviewed this question in an extremely interesting and practical manner, and one cannot but see how very reasonable his views on the subject are.

## ON THE PATHOLOGY AND CURE OF SNAKE-BITE.

By AUGUSTUS MUELLER, M.D., of YACKANDANDAH, VICTORIA.

### II.

It is universally assumed as an axiom in science that a theory on any subject must be accepted as correct and fully established if it accounts satisfactorily for all the phenomena observable in connection with that subject, or, in other words, if it demonstrates these phenomena to be the outcome, the result of the operation of one law. But if to this inductive proof of the correctness of any theory, another one is added by the deductive method, by one special successful application of it, the proof is little short of mathematical accuracy. Though there are people in Australia presuming to take the lead in medical science and in journalism, either in happy ignorance of the above fundamental principles of scientific inquiry, or, if aware of them, considering themselves at liberty to ignore them when it suits their purpose, the true votaries of science here and all the world over will, I think, readily grant that I have fully established my theory of the action of snake poison if I show conclusively that all the symptoms produced by the latter find a ready explanation in the law of reduced motor nerve force emanating from the motor nerve centres; a law that in its turn points to strychnine as the antidote "par excellence." To this task I will now devote myself.

Of all the varying forms of disease that present themselves to the medical practitioner, few are more difficult of correct analysis than the puzzling phenomena of snake poisoning. The cause is the same, the principal of action identical in the venom of all the different species of snakes; yet the effects differ so widely that it is difficult to find two cases exactly alike each other in the symptoms they present to the practitioner. Then these symptoms are ushered with great rapidity, masking each other and making it next to im-

possible to observe and analyse them separately. Finally, to crown our difficulties, come the depressing effects of fear, inseparable in all but the strongest minds, from the consciousness of having been bitten, so similar in appearance to those of the snake poison that sometimes it is by no means easy to decide which of the two is in operation, and that only those cases are of real value to the observer from which this element of fear is completely excluded.

Such cases, however, in which the victim is not aware of having been bitten by a snake are of very rare occurrence. It has been the good fortune of the writer to observe two of them during his Australian career, and these, together with his own experience more than thirty years ago, still fresh in his memory, though little understood at the time, have been more instrumental in guiding him to a correct understanding of the modus operandi of snake poison than dozens of the ordinary kind that have come under his observation. They impressed on him, beyond all possibility of doubt, the important and significant fact that paresis of certain voluntary muscles is the first in the order of time of the symptoms that initiate snake poisoning. Reasoning from this one fact, he has been enabled to reduce to order the confusing array of its symptoms. The paresis affects invariably in the first instance the muscles of the lower extremities. They obey the mandates of the will with great difficulty, and from minute to minute become less capable of that concerted action, which is necessary for locomotion. The limbs feel as if a heavy weight was attached to them, and become unable to maintain the upright posture, though in a recumbent one they can still be moved slowly. Sensation at this early stage is perfect. This, together with the fact of the paresis being on both sides alike, and rapidly extending upwards, points unmistakably to its central origin in the cells of the anterior columns of the spinal cord. The person, at first unable to stand or walk, almost immediately becomes unable to sit upright, and then collapses helplessly.

But simultaneously with these symptoms, and masking them to a great extent, a deadly faintness seizes the victim. The skin, of an ashy hue, becomes very cold; the pulse soft and compressible, rapidly increases in frequency, respiration also becomes more frequent and shallow, and the patient complains of an indescribable feeling of agony about the heart (*Herzensangst*).

Analysing these symptoms in the light which the paresis of the voluntary muscles and its undoubted origin in the anterior columns throw on the subject under discussion, we are justified in assuming that they also emanate from a central cause—that the poison in its upward course affects

the vaso-motor nerve centres as it does the anterior columns, causing a paretic condition of the heart and arteries, thereby reducing the blood pressure, and materially interfering not only with the circulation of the blood, but also with its healthy normal condition.

We have every reason to assume—though it is not patent to direct observation—that the motor centres throughout the whole sympathetic system of nerves participate in this paresis. In acute cases we have the paralysis of the pupils and the difficulty or complete arrest of deglutition as constant symptoms pointing in this direction, and as less constant ones, tympanitis, vomiting and diarrhoea; whilst in chronic ones, general icterus, with persistent constipation and disturbances in the urinary system are indicative of deficient innervation.

That the poison of our Australian snakes concentrates its effects in fatal cases on the sympathetic system, or at least that part of it which in combination with certain spinal nerve centres supplies the cardiac plexus, may be inferred from the fact of death resulting with us from paralysis of the heart. This is the principal difference, it seems, between the Australian snake poison and that of the cobra. The latter, as has been ably shown by Dr. Wall, becomes fatal by paralysis of the glosso-pharyngeal and respiratory nerve centres and consequent asphyxia. Although in severe cases with us the picture drawn by Dr. Wall of a person suffering from cobra-bite is approached at times by the pharynx becoming paralysed at an early stage, and, later on, the tongue protruding and the lower jaw dropping down passively—respiration, though frequent and shallow, is never interfered with to a degree that would make its artificial continuance prolong life for a minute, far less for hours, as it does in India; death invariably being caused here by paralysis of the heart, which no amount of artificial respiration will influence in the slightest degree.

But to return to the general description of symptoms. When the paresis has reached the muscles of the neck and head—when the latter can no longer be kept up and balanced, but sinks forward or to the sides, mere paresis of the voluntary muscles quickly deepens into more or less complete paralysis, and then, if not previously, those highly interesting brain symptoms appear, that range from a mere feeling of intoxication to delirium and sleep and culminate in coma. They are of the highest importance and interest, both from a physiological and psychological point of view; for, resulting, as no doubt they do, from a reduction of motor nerve force, they throw an unexpected flood of light on two hitherto obscure questions—What is sleep, and what is thought?

## PROCEEDINGS OF SOCIETIES.

### MEDICAL SOCIETY OF QUEENSLAND.

GENERAL MEETING, held on September 11, at 8.30 p.m. in the School of Arts, Brisbane. Present: Drs. Little, Tilston, W. S. Byrne, E. H. Byrne, Taylor, Shout, Owens, Campbell, C. Kebbell, Thomson, and Love. Dr. James Booth, of South Brisbane, was present as a visitor.

The minutes of last meeting were read and confirmed.

DR. W. S. BYRNE showed a chylous urine.

DR. LITTLE showed a very large gall stone weighing 104 grains, which had been passed per anum by a patient in the Brisbane Hospital. In shape it was like half of a cork, with a concave depression on the upper aspect and a convexity on the lower surface. The circumference measured  $3\frac{1}{2}$  inches in either direction.

DR. OWENS read notes of two cases of foreign body in the eye. 1. A piece of metal which lay between the iris and the lens, in which case he removed the lens afterwards by Pridgin Teale's suction method with a very good result. Patient exhibited. 2. A splinter of wood which had remained embedded in the lower lid for two years.

DR. LITTLE then read notes of a case of abdominal section for uterine fibroid which he had lately operated upon. The patient made a slow, but complete, recovery.

The SECRETARY suggested that it was about time that the members began to think about the annual dinner. Last year it had been held in the last week of October, and he proposed that the same date be selected on this occasion.

DR. THOMSON thought more members would attend if the subscription was limited to one guinea, and that champagne should be excluded from the wine list.

It was pointed out that one guinea would be sufficient without such exclusion if enough members would attend.

DR. OWENS proposed that the President, Dr. W. S. Byrne, Dr. Thomson, and the Secretary be appointed a dinner committee to arrange matters for the annual dinner to be held about the end of October. Carried unanimously.

DR. TAYLOR brought before the notice of members the "Sale and Use of Poisons Bill, 1888," which was then under consideration in the Legislative Council.

The PRESIDENT thought that, after the agreement of the Pharmaceutical Society (who had drawn up the Bill) to co-operate with them in all questions connected with legislation, that society had not acted courteously in not submitting the subject to them for discussion or approval. He thought the subject most important, and would like a little time to read its contents carefully, hence he considered it advisable to have a special meeting to discuss the Bill.

DR. OWENS proposed to form a committee of the whole to consider the Bill. Seconded by Dr. THOMSON. Carried.

On Dr. Taylor promising to supply draft copies, it was decided to hold a special meeting on Friday evening, September 14, at 8.30, in the School of Arts.

SPECIAL GENERAL MEETING of the Medical Society of Queensland, held on Friday, September 14, at 8.30 p.m. in the Brisbane School of Arts, to consider the "Sale and Use of Poisons Bill, 1888," then before the Legislative Council. Present: Drs. Little, Taylor, Lautern, Campbell, Shout, W. S. Byrne, and Love.

The SECRETARY read the notice convening the meeting, and intimated that he had issued notices to 40 members and drafts of the Bill to 25.

Each clause was carefully and separately considered, and some amendments in the phrasing of the Bill and of the poisons included were suggested.

DR. TAYLOR thanked the members present for their advice.

GENERAL MEETING of the Queensland Medical Society, held on October 9 in the School of Arts, Brisbane.

DR. HOGG, of Goodna, showed (1) A descending colon, covered with numbers of tricocephalus dispar, and read a paper on the probable casual relation existing between this whipworm and dysentery (*vide* page 60). (2) Two aortic aneurisms, one filled with soft clot; and the other on which tracheotomy had been performed for the relief of dyspnoea, in which there was a communication between the aneurism and trachea filled with recent clot. (3) An adherent pericardium. (4) A brain, one-half of the cerebrum being smaller than the other, and the opposite side of the cerebellum being similarly affected, showing the crossed relation of the fibres of cerebrum and cerebellum.

A hearty vote of thanks was accorded to Dr. Hogg for his interesting paper and exhibits.

#### SOUTH COAST OF NEW SOUTH WALES MEDICAL ASSOCIATION.

AT a meeting of district medical practitioners held at Berry (then known as Broughton Creek), on April 20, 1888, the following gentlemen were present:—Drs. W. Ashe, C. Terrey, and J. S. Wilson, of Kiama; J. P. Brereton, of Terara; H. K. King and T. Matthews, of Nowra, and T. R. Lewers, of Berry. It was unanimously resolved that the meeting form a Medical Association, to hold quarterly meetings at Berry, and that any duly qualified medical practitioner registered by the Medical Board of New South Wales shall be eligible for membership. The annual subscription was temporarily fixed at half-a-guinea. Dr. Brereton was elected President, he being the practitioner who has been the longest in the district, and Dr. Lewers was appointed Secretary and Treasurer.

A meeting of the above was held at the Commercial Hotel, Berry, on Friday, October 19, 1888. Present: Drs. Brereton (President), Ashe, King, and Lewers. Dr. Boyd, a visitor, was also present. The minutes of the previous meeting were duly read and confirmed. The President then read the following

#### INAUGURAL ADDRESS.

Gentlemen,—It is my pleasing duty at this our first meeting to congratulate you on the inauguration of the South Coast Medical Association, and to express the hope that the outcome of our meetings may be of material and substantial benefit, not only to ourselves as a branch, but to the medical world, and, as a natural consequence, to the lay public at large.

A chronicle of events that concern the treatment of diseases which come under our individual notice, during our career, together with the result of any therapeutical or pathological researches in connection with the same: the disease in the first place, the treatment in the second, and the result in the third place, will no doubt form the nucleus of many interesting and beneficial debates in the Society we are this day inaugurating.

We have, I am pleased to say, a New South Wales Branch of the British Medical Association in Sydney, but though it is said "distance lends enchantment to

the view," distance in this case is of material detriment, as it is impossible for practitioners in a country district like this to neglect their practice for a sufficient length of time to attend the meetings of this valued and valuable society. Our Society will, in a measure, overcome this difficulty, and will give every medical man on the South Coast a chance to disseminate the medical knowledge gained by him in practice, and at the same time subject any paper read by him, or a substitute, to a general discussion, in which it is to be hoped none of the gentlemen present will be bashful, as a sound discussion and thorough criticism must certainly forward the aims and end of the "South Coast Medical Association," and tend to complete the ends of medical etiquette, which is a point (so far as I have seen in N.S.W.) sadly neglected. This neglect of professional etiquette is the more to be regretted, as, when thoroughly adhered to, it greatly assists in excluding from our midst the charlatan element, of "Quacks," and unregistered persons, who are allowed by the Government to place any number of letters after their names to suit their purpose, and to carry into effect their boast over those who have taken out their lectures, &c., and have passed their examinations.

Gentlemen, as you are aware, the first Medical Bill of 1880 did not pass. Why? Because there were men in Parliament who could, perhaps, say like many patients they had, "Doctor, I have almost attained the age of three score years and ten, and I never took a dose of medicine in my life." If this should be one of the opponents of the Bill, would it not be a fair question to ask him the full routine of his habits, and if he only wanted to save an inquest, and, at the same time, to promise at his demise to give the medical men a chance of dissecting him, and so gaining some information. The foregoing is only an illustration of the complaint of one of this small number of active opponents who delayed and prevented the passage of the Bill, although the majority of the Cabinet were in favour of it.

A considerable amount of benefit might be derived by physician and patient if, on the transference of a patient from one attendant to another, a general synopsis of the history of the various points of the disease and its treatment should be forwarded up to time of last attendance to the new attendant.

I would suggest that our Honorary Secretary be instructed from this meeting to write to the Secretary of the New South Wales Branch of the British Medical Association, forwarding to him full particulars of meeting, and asking him if the South Coast Medical Association can be enrolled as a branch of the Medical Association of New South Wales, stating inconvenience of travelling, leaving practice, &c.; or if a representative in Sydney (or delegate) would suit the purpose. This I do not table as a motion, but merely offer as a suggestion for discussion. There are many other matters of equal and vital importance, which I cannot stay to introduce at present, but which it will be well for us to carefully consider at our future meetings. Meanwhile, I again congratulate you on the inauguration of so valuable and useful an Association, and sincerely wish it a full measure of success.

DR. ASHE thought it would be more advantageous to affiliate with the Medical Defence Association than with the British Medical Association.

DR. LEWERS considered that as this Association was founded to promote professional fellowship and the discussion of local forms of disease for the mutual benefit, these objects could best be accomplished by the Association remaining independent, and not by linking itself too closely with any other medical institution.



DR. THOS. ROSS LEWERS, the Honorary Secretary then read the following paper:—

#### SYSTEMATIC INVESTIGATION OF DISEASES AND REMEDIES.

Some years since the Medical Society of Victoria "set a subject," to borrow a school phrase, for its members to take into consideration, write about, and discuss. This subject was *Diphtheria*, at that time very prevalent and fatal throughout Victoria. The result was the production, some two months later, of several excellent papers and records of observations on that topic, with a useful debate afterwards. The thought has occurred to me whether our small body could not advantageously systematize part of their work by agreeing at each meeting on some disorder that each member shall pay particular attention to during the ensuing quarter, and that the reading of essays on and discussion of this subject shall form the first matter of consideration at the next meeting. With the limited opportunities of country practice it is difficult for one to find enough cases of any one form of disease to enable a steady advance in our knowledge to be made. But our united experience might enable us to reach some tangible good. I have had a very large number of cases in this district of a form of catarrhal gastritis and enteritis occurring as an epidemic in changeable weather, and confined in its incidence to children and, more particularly, infants. I am not aware if others have noticed the prevalence of this distemper and its peculiar features, but perhaps a collective examination of its phenomena might lead to an understanding of its etiology, and suggest measures for its prevention. Again, our district flora, in some of its diversified forms, must conceal some potent principles which might and should enrich our *materia medica*. From enquiries made of the aboriginals and early settlers, I learn that prior to the advent of medical practitioners to the district, diarrhoea and dysentery were usually and successfully treated with a decoction of the young tops of a common wayside plant, much resembling the English bramble, but bearing a red berry instead of black. The late rains have started growth in this plant, and it is my intention to forthwith experiment with it in all suitable cases as they arise. May I ask your co-operation in the investigation?

#### NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 76th General Meeting of the Branch was held in the Royal Society's Room, Elizabeth-street, Sydney, on Friday, 2nd November, at 8.15 o'clock.

Present:—Dr. Chambers (President), in the Chair, Drs. Ellis, Crago, Hankins, Fiaschi, Knaggs, Wm. Chisholm, Fisher, Sydney Jones, Scot-Skirving, Brady, Martin, Roth, Reading.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced that since the last meeting Dr. Bohrsman, a member of this Branch, had died. Resolved that a letter of condolence be forwarded to the family of the deceased gentleman.

DR. ELLIS read a paper, in conjunction with Dr. Scot-Skirving, on a case of "Aortic Disease, with Rheumatic Pericarditis and double Pleuro-Pneumonia, Paracentesis Pericardii."—Recovery.

DR. SCOT-SKIRVING said that on one point he believed he differed from Dr. Ellis, viz., concerning the nature of the attack, which had called forth the operation of paracentesis. He now did not think it due to pulmonary embolism, though the sudden and alarming

symptoms reminded of those tragic terminations of life seen occasionally during labour. Against pulmonary oedema he also gave his opinion, its too sudden onset and passing away too rapid to correspond to even the so-called "fulminating oedema" of German observers. For his part, he now believed it to have been rather an unusual manifestation of heart failure.

DR. CHISHOLM said he had listened with very great interest to the paper read by Dr. Ellis, especially as it had been spoken of outside the Branch. With reference to the point raised by Dr. Scot-Skirving, as to the case being one of heart failure, he (Dr. Chisholm) rather agreed, but leaned also somewhat towards the idea of its being possibly a case of pulmonary oedema rather than an embolic explanation.

DR. CRAGO said that Drs. Ellis and Scot-Skirving were to be congratulated on the successful issue of the case. He (Dr. Crago) remembered a very similar case he had about three or four years ago. When he was called in the patient had very much the same appearance as that described in this case, and he was puzzled to know what to do, so he injected a little morphia hypodermically, and in half-an-hour the patient had considerably improved. This man had freedom from attack for about twelve months; but about that period he had a return, and injections of morphia were again used with marked effect. He (Dr. Crago) thought that in the case of Dr. Ellis there must have been cardiac failure, as the main factor in the terrible symptoms described.

DR. FIASCHI said not only had the paper proved interesting, but members could draw practical conclusions from the results—first, as to the tapping, it is usual to tap at the fourth interspace, but in this case the puncture was made much higher, showing that the beaten track could in some instances be left with safety, and the operator could choose his own place. The second point was that the heart had been touched by the canula without any ill-effects; in fact, with good results, as in stimulating the heart by mechanical means it no doubt assisted the patient to tide over a critical period. Another point in this very interesting case was the use of oxygen. Theoretically, oxygen had been thought well of for some time; but in the case under discussion its practical use is demonstrated. He (Dr. Fiaschi) thought the case one of heart failure.

DR. SYDNEY JONES said he had with much interest listened to the paper just read, and could not but think that the attack was one of the nature of an angina. The subtraction of so small an amount of fluid could not have had so good a result in a case of pulmonary oedema, or in pulmonary embolism, the urgent symptoms having disappeared in a few minutes. The treatment had no doubt been the correct one.

DR. CRAGO read a paper on "Priapism," with notes of a case, which will be found on page 81.

DR. FIASCHI referred briefly to the *nervo-vascular* mechanism of erection, and from a general survey of these factors, and the interesting clinical outline given in the case just read, he believed the condition to have originated in a central nervous change.

DR. SCOT-SKIRVING said he was inclined to favour the belief that the case was an example of one of the rarer manifestations of the gouty diathesis. He (Dr. Scot-Skirving) remembered a case which he had about 18 months ago, but which was not nearly so severe as the one described by Dr. Crago, the symptoms, however, were much the same. The patient was of gouty stock. He was treated for the gouty condition, and the parts rubbed with an ointment; a complete disappearance of the priapism and nodule round the corpus spongiosum took place.

## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castlereagh Street, Sydney.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, DECEMBER 15, 1888.

## EDITORIALS.

### THE NEXT INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA.

THE second session of this Congress, which will assemble in Melbourne next month under the presidency of Mr. T. N. Fitzgerald, F.R.C.S.I., will be an event of much interest and importance, and, as we learn from the Organization Committee, promises to be very successful. The Governors of the Australasian colonies have cordially expressed their interest in the Congress, and have consented to act as patrons. The Presidents of all the Medical Societies of Australasia, together with Dr. Verco, of Adelaide; Dr. Sydney Jones, and the Hon. J. M. Creed, of Sydney; Dr. Cosby Morgan, of Newcastle; and Dr. Garde, of Maryborough, Queensland, have accepted office as Vice-Presidents of the Congress. The sections comprise Medicine, of which the Hon. W. F. Taylor, M.D., of Brisbane, is President; Surgery, E. C. Stirling, M.D., of Adelaide, President; Hygiene, forensic and state medicine, H. N. MacLaurin, M.D., of Sydney, President; Anatomy and physiology, Professor T. P. Anderson Stuart, M.D., of Sydney, President; Pathology, Joseph Bancroft, M.D., of

Brisbane, President; Obstetrics and gynaecology, F. C. Batchelor, M.D., of Dunedin, President; Diseases of the eye, ear, and throat, M. J. Symonds, M.D., of Adelaide, President; Psychological medicine, F. N. Manning, M.D., of Sydney, President; and Pharmacology, Baron Sir Ferdinand von Mueller, M.D., President. There will also be a sub-section for diseases of the skin, and one for diseases of children; and, if practicable, special general meetings of the Congress will be held for the discussion of subjects such as "The Climates of Australasia," "Colonial Fevers," and "Hydatid Disease." It is also proposed to organize a Congress Museum, and members are invited to aid in making the collection of specimens as large and varied as possible.

The general arrangements for the scientific work of the Congress, and for the entertainment of members, are as follows:—

On Monday morning, January 7, the inaugural meeting of the Congress will be held in the Wilson Hall of the Melbourne University, when His Excellency the Governor will declare the Congress open, and the President, Mr. T. N. Fitzgerald, F.R.C.S.I., will deliver the opening address of the session. The Mayor of Melbourne will afterwards receive the members at the Town Hall, and entertain them at luncheon. In the evening the Congress will re-assemble at the Freemasons' Hall, when the address in Medicine will be delivered by the Hon. Dr. Taylor, of Brisbane, and the address in Anatomy and Physiology by Professor Dr. Anderson Stuart, Dean of the Faculty of Medicine in the University of Sydney.

On the Tuesday morning a general meeting will be held in the Wilson Hall, at which Dr. Stirling, of Adelaide, will deliver the address in Surgery, and Dr. Batchelor, of Dunedin, that in Obstetrics and Diseases of Women. Lunch will be provided at the University, and the afternoon will be devoted to sectional meetings. In the evening members will be invited to dine with the President of the Congress at the Town Hall.

On the Wednesday morning the Congress will assemble in the Wilson Hall, and papers will be submitted, and a general discussion held on the subject of Hydatid Disease. Lunch at the University will again follow, and the afternoon will be engrossed by sectional meetings. In the evening His Excellency the Governor and Lady Loch will receive the members of the Congress.

On the Thursday morning a full meeting of Congress will be held in the Wilson Hall, at which Dr. MacLaurin, the Medical Adviser of the Government of New South Wales, will deliver

the address in Hygiene, Forensic, and State Medicine. This will be followed by the address in Pathology, given by Dr. Joseph Bancroft, of Brisbane. Lunch will be laid at the University, and the whole afternoon will again be given up to sectional meetings. In the evening the Hon. the Speaker of the Legislative Assembly will invite the members of Congress to meet the members of Parliament at dinner in the Town Hall.

On the Friday morning the Congress will re-assemble in the Wilson Hall, to hear the address in Psychological Medicine, delivered by Dr. Manning, the Inspector-General of the Insane in New South Wales; after which Dr. Symonds, of Adelaide, will deliver the address on Diseases of the Eye, Ear, and Throat. A lunch at the University will be followed by another general meeting, when the fevers of Australia, and especially enteric fever, will be the subject of several papers and of a full discussion. In the evening members will be invited by the Executive Commissioners of the International Exhibition to attend a special concert.

On the Saturday morning, January 12, Baron Sir Ferdinand von Mueller will deliver the address in Pharmacology in the Wilson Hall, after which a special meeting will be held to determine the place and time, and to elect the president of the Third Session of Congress. An excursion by train to Sunbury will follow, where Sir William and Lady Clarke will entertain members at a garden-party at Rupertswood. The Premier, on behalf of the Government, promised at an early stage to take part in the entertainment of the Congress visitors, but he desired to postpone all details till a later period in the year.

Concerning facilities for members travelling to Melbourne, it may be mentioned that the Railway Department will grant excursion tickets at single fares to all members, while those coming from Europe, America, or India, will be furnished with free passes. The various steamship companies will grant tickets at special excursion rates, or will make substantial reductions in the price of tickets. The secretary, Professor Allen, requests all visiting members to register their Melbourne addresses with him, and to inform him at their early convenience what members of their families, if any, will accompany them. Through the kind offices of Mr. E. G. Fitzgibbon, the town clerk of Melbourne, a central room in the Town Hall will be at the disposal of members, where they can meet by appointment, to which letters and parcels may be sent, and where, at times which will be notified, the secretary or associate secretaries may be interviewed.

## THE CHIEF SECRETARY OF VICTORIA AND THE PROSECUTION OF ILLEGAL MEDICAL PRACTITIONERS.

THE action of the Chief Secretary of Victoria, Mr. Deakin, in directing the police not to initiate proceedings against persons practising as medical practitioners in that colony without being registered by the Medical Board, shows a singular disregard of the responsibilities and duties of his office. He seems either to be unconscious or willingly neglectful of the fact that a law regulating the practice of medicine in a country is enacted for the protection of the public, and but in a very minor degree for the benefit of properly-educated medical men; and that, when he is taking unfitting advantage of the accident of his being the Minister of the Crown in whose department the police are, to prevent them taking such action as is necessary to protect the public from the imposition and false pretences of men practising without proper training or proof of their fitness, and with such announcements as to lead the people consulting them to believe that they have these essentials, he becomes an accomplice in their offence, and morally, if not legally, an accessory to crimes the least of which is that of obtaining money under false pretences. The idea which he promulgates, that it is the duty of the medical societies to institute proceedings against quacks, is absurd and totally unworthy of a man who, by however improbable an accident, has arrived at the position he occupies in the government of a great colony. The existence of a Government is only justified by the protection it affords the public against all preventable evils, one of the greatest of which is the lax administration of a law enacted with the object of preventing persons not having facilities for minute enquiry from being imposed on by the misrepresentations of scoundrels. Though we are of opinion that the majority of people are incapable of exercising a rational judgment in relation to the practice of medicine, and that, therefore, it would be undoubtedly for their good that in such matters they should be treated like children by being protected against the evils resulting from their own credulous folly, we do not think it possible to prevent silly persons from consulting uneducated, but in the belief of the dupes heaven-inspired, doctors; and so we do not advocate what is practically impossible, viz., that any person should be prevented from employing whomsoever he chooses for the repair of his vile body. All we think possible is

the enactment of the recommendation of the Select Committee of the Legislative Council of New South Wales that every person practising as a medical practitioner should be obliged to place in some conspicuous place on the house in which he carries on his calling an announcement of that fact, and that all those who do so without being registered by the Medical Board should be obliged to add to their announcement the words, "Unregistered by the Medical Board." If this were enforced, any persons consulting such a man would do so with their eyes open, and having done so without the excuse that they were ignorant of the professional character of the individual consulted, would richly deserve all they suffered as a consequence. As far as we can judge of the feeling of the profession in Victoria from the report of the discussion at the meeting of the United Medical Societies called to consider the subject, we think this is the opinion of the more enlightened and far-seeing medical men.

#### THE REGISTRATION OF DEATHS IN VICTORIA.

It appears, from the failure of a recent prosecution in Melbourne for giving a false certificate of death, that the Act providing for the registration of deaths in that colony is even more defective than that in New South Wales, for, though in the latter colony it was shown by the evidence given before, and by the report of the Select Committee of the Legislative Council that as a means of protection of life against crime it was almost valueless, chiefly on account of the Act requiring no certificate of death, of its allowing the burial of a body before registration, and of its permitting the registration of the death at any time within thirty days after it occurs, yet in the former colony the first two of these facilities for crime are the same, but the latter is twice as bad, for in Victoria the registration of the death may be delayed for sixty days. The necessity for more stringent legislation was pressed by the Committee upon the New South Wales Government, but with as yet but little effect, and a bill introduced by the Hon. J. M. Creed in the Legislative Council, which would have effected the desired object, was ruled out of order because it provided for the cost of the necessary books being defrayed from the consolidated revenue, which brought it into collision with the acknowledged privileges of the Legislative Assembly as to the control of the expenditure of the peoples' money.

#### HARBOUR EXCURSION AND LUNCHEON OF THE MEDICAL PROFESSION OF SYDNEY.

THE President of the New South Wales Branch of the B.M. Association (Dr. Chambers), and the Chairman of the Medical Section of the Royal Society of that colony (Dr. Knaggs), on Nov. 24th, entertained the members of the profession in Sydney and suburbs, together with many members of the Senate of the Sydney University and some other representative men, by a harbour excursion and a luncheon at Cabarita, on the Parramatta River. The munificent hospitality of these gentlemen was thoroughly appreciated by the guests, and it was universally acknowledged that the idea so generously conceived, and so effectively carried out by the hosts, did much to cement the friendly feelings of the profession, and to obliterate that personal isolation so likely to arise in the case of the members of a profession whose duties are so exacting and wearying. The cordiality of the entertainers is thoroughly reciprocated, and it is intended to in a measure repay the obligation the profession feels to these gentlemen by inviting them to a return picnic, arrangements for which will, it is hoped, shortly be settled.

WE desire to call the attention of our readers to the series of papers on "Snake-bite," by Dr. Mueller, the first of which was published in our last, and the second in this issue, and they will be continued in future numbers. Dr. Mueller's experience leads him to believe that strychnia is a true physiological antidote to snake poison, and the success which he reports to us as having attended its use in several cases is so very marked as to induce us to specially ask that the suggestions and cases to be submitted shall receive the careful consideration of the profession.

#### LETTERS TO THE EDITOR.

##### CHRONIC RHINITIS.

(To the Editor of the Australasian Medical Gazette.)

DEAR SIR,—In reply to your correspondent "Rubeus," I will preface my remarks by saying that in order to give a definite opinion on his case, it would be necessary first to make a rhinoscopic examination of his nose. However, from the symptoms which he describes, I should think he is suffering from hypertrophy of the tissues of the inferior turbinated bodies of vaso-motor origin. As is well-known, these bodies are supplied with erectile tissue, which, in some cases when turgescient, is capable of shutting up the breath-way through the nostrils altogether. By the pressure of these swollen bodies on the septum, a constant irritation of the nasal mucous membrane is kept up; through this

and the augmented flow of blood to the parts, caused by the above-mentioned erectile tendency, an increased flow of mucus is promoted.

I do not think your correspondent is justified in altogether excluding polypi as he does, if a rhinoscopic examination has not been made by a competent rhinologist; for although no polypi may be visible low down in the nose, a polypoid hypertrophy of the mucous membrane high up between the middle turbinated body and the septum may exist.

As to treatment, presuming that the condition which I have surmised exists, there is nothing equal to the skilful use of the galvanocautery. With this the diseased tissue can be removed with ease and precision; or the parts not requiring actual removal may be scorched with the burner to cause their subsequent contraction. With cocaine the operation is not very painful—not nearly so much so as one would anticipate.

The redness on the outside of the nose is also evidently of vaso-motor origin, and it is part of the same diseased condition which exists inside the organ. The cure of the inside often leads to a disappearance of the redness outside without further treatment.

There is a remedy which has a marked effect in removing cutaneous hyperæmia, and I would recommend its use in this case. I refer to Icthyol (sulphoicthyolates of ammonia). A three per cent. ointment can be made with lanoline, and spread on strips of soft muslin after the method of Dr. Unna. These salve muslins must be closely applied to the part in several layers, and must not be covered with any waterproof material. This is much better than smearing the ointment on the part. The application is much more effective if continuous. Icthyol soap should be used to wash the part. The internal use of the same drug assists in the cure. Five (5) drops, well diluted with water, can be taken three times a day, and continued for a long time if required. A 10 p.c. ointment is sometimes used.—I am, yours truly,

A. J. BRADY,  
Surgeon Ear, Throat, and Nose Department,  
Sydney Hospital.

3 Lyons Terrace, Hyde Park, 21st Nov., 1888.

#### CHRONIC RHINITIS.

(To the Editor of the A. M. Gazette.)

SIR,—I would recommend your correspondent "Rubeus," who, in your last issue, asks for some suggestions as to the treatment of an obstinate case of the above affection, to use inhalations of nitrate of silver by means of a special apparatus which I possess, and which I would be happy to show to any one interested. If your correspondent resides in Sydney, I would be only too glad to let him take the inhalations at my residence.—I am, yours faithfully,

A. H. FIELDSTAD, M.D.  
173 Liverpool-street, Hyde Park, November 19.

#### A DISCLAIMER.

(To the Editor of the A. M. Gazette.)

SIR,—I take this the earliest opportunity of disclaiming any connection with the notices that have recently appeared concerning me in the lay press.

Further I beg to state that had it been in my power I would have used my utmost efforts to have prevented their appearance. I am, &c.,

A. J. BEEHAG,  
B.A., &c.

98 Rue de Monceau, Paris, October 19, 1888.

#### CENTENNIAL HARBOUR EXCURSION AND LUNCHEON TO THE MEDICAL PROFESSION OF SYDNEY AND SUBURBS.

At the invitation of Dr. Chambers, President of the New South Wales Branch of the British Medical Association, and Dr. Knaggs, Chairman of the Medical Section of the Royal Society of New South Wales, about 160 medical practitioners of Sydney and suburbs, including representatives of the profession at Windsor, Penrith, Newcastle, and Singleton, attended a most successful harbour excursion and luncheon on Saturday November 24, to commemorate the Centennial Year of New South Wales. The party also included a number of distinguished laymen, among them Sir John Hay (President of the Legislative Council), the Hon. Dr. Garran, M.L.C., LL.D., Sir William Manning, Mr. Justice Windeyer, Mr. Jas. Inglis (Minister for Education), Professor Scott, the Rev. Mr. Jackson, and others. The party, accompanied by a brass band, left Circular Quay shortly after 11 o'clock in the steamer "Alathea," and proceeded down the harbour, which, unfortunately, was covered with such dense masses of smoke that its well-known beauties were totally obscured. After a short cruise, during which light refreshments were served, the party was taken on board the school-ship "Vernon." The boys were put through some drill and marching exercises, in which they acquitted themselves in a manner that showed a thorough acquaintance with what they were doing. The boys also showed themselves very active and quick in manning the yards and afterwards in putting off in the boats. The Vernon band also accompanied the party to Correy's gardens, and, on the way, played several selections admirably. As the launch put off the visitors were accorded three cheers from the youngsters, who lay by in their boats, and the party responded quite as heartily. On arriving at Correy's Gardens, Cabarita, about 2 o'clock, it was found that some of the guests had come by road or by Parramatta River steamer. An excellent luncheon was spread in the pavilion, and was much appreciated by the 200 gentlemen who sat down. The chair was occupied by Dr. Chambers, and the vice-chair by Dr. Knaggs.

The CHAIRMAN gave "The Queen," and afterwards "The Governor," which were duly honoured.

DR. KNAGGS proposed "The Parliament of New South Wales." He drew an analogy between the duties of the medical profession and those of the Parliament. Medical men, he said, looked after the interest and health of their patients; Parliament looked after the good of, and bolstered up the constitution of the country. (Laughter and cheers.) The Minister for Education had just whispered to him that Parliament also "bled" the country. Personally he could not say, but perhaps the Minister knew best. (Renewed laughter.) Certainly they prescribed its physic. And what were the diseases? Like small-pox, Socialism and Radicalism were dangerous and infectious, and were opposed to the well-being of large numbers of the members of the community. They were slow in convalescence, and left disfiguring scars behind them. Paralysis, or waste of the muscles, could be compared to trades-unionism, which thrived upon the muscles of the working-man. He also pointed out that there was danger from the incipient wasting disease of protection and from the sporadic skin disease known as "log-rolling" (laughter), and he hoped that Parliament, as the nation's doctor, would be able to cope with all these diseases, and that it would successfully protect the national wealth of this great nation. (Applause.)

Sir JOHN HAY responded for the Legislative Council. He was delighted, he said, to meet so many of his fellow-citizens. Although he had not had much experience with doctors individually—never having required their services much—(laughter)—he respected them as a body, and many of them had been his friends for years. Some time they might have occasion to come before the Legislature; and if they asked only what was fair and of advantage to the country, they could do so without hesitation. At great trouble and expense they had gained a knowledge of their profession, and had a right to be protected in that knowledge. (Applause.) The people of the country had a right to know who were qualified to administer to their medical wants, and to distinguish between properly qualified medical men and those who attempted to grasp the advantages of the profession unfairly. It was a great gain to the community that there should be this body of medical men to minister to them. He respected the profession very much, and was glad to know that a large number of their body was composed of native-born men, who he hoped would be able to take their place alongside of professional men from other countries. They had a school here, in connection with the University, to teach the profession, and he advised them to adhere to it, and to insist upon the right of other young men being educated in the same way as they had been. (Applause.)

Mr. INGLIS, who replied on behalf of the Legislative Assembly, expressed the pleasure he had in being there at the invitation of perhaps the noblest profession in the civilised world. There was, no doubt, great truth underlying the humorous speech which Dr. Knaggs made in proposing the toast. The analogy he made was a good one. To carry it further, he might say that in politics, as in the medical profession, there were various grades. They recognised that medical men stood out from amongst the learned professions on account of their self-denial and generous services. But what of the politician? He tried to do the best he could for the country, for its moral welfare, the same as the doctor tried to do his best for its physical welfare. Amongst physicians they heard of "quacks"; so politicians had grovellers who came in amongst them, and would like to take part in their national life, of whom it might be said that, although they were amongst them, they were not of them. (Applause.) These men were continually decrying this country to which they owed everything they had, and contending that some other little miserable part of the earth was better than this. (Laughter.) They heard politicians traduced, no doubt, but when they heard this let them also remember that their own profession was not free from reproach, because of miserable quacks and crawlers who, under the name of doctors, did a vast amount of harm. Still, on the whole, it must be taken that Parliament was a reflex of what the people were—(cries of "No, no," laughter, and applause)—but he hoped that the day would soon come when it would be a nobler and better place than it was that day—when, instead of members sounding their own merits, and straining after evanescent popularity and the praise and clamour of the multitude, they would strive to fulfil the noblest and best aspirations of Parliamentary life, and work only for the good of the community. (Applause.)

Dr. GARRAN proposed "The Year we Celebrate." He said that he had found it impossible to stay away from this gathering; he hoped that it would be the first of a long series—(applause)—and that the doctors would keep him alive for many years to see them. (Laughter.) Although not one of them, yet owing to

the poverty of the English language, he also was a doctor. He had found this very inconvenient. He had been summoned not only by day but by night, and on one occasion a medical brother, who did not know him, came in a great hurry to call him to a consultation. (Laughter.) Had it not been for the fear of dire consequences before his eyes, he might have been tempted to practise, and by looking wiser than he was, and by prescribing a little colored water, have earned many welcome guineas. (Applause.) Still he had always resisted the temptation, and hoped that all quacks would follow his example. He did not intend to say very much about the year they were celebrating. It was just closing. This would, perhaps, be the last of the celebrations. This was proper enough. The doctors generally saw the first and the last of us, and he supposed they had arranged their picnic for November in order to give the undertakers a chance for December. (Laughter.) They could afford to be happy on this occasion. They had no responsibility in respect to the year coming to an untimely end, and he trusted they would always be able to say the same with respect to their patients. (Laughter.) There was no doubt that this year would turn out to be a trying one for all classes, and it would call to mind the times of trial during which was laid the foundation of our prosperity. Australia would never be the worse for its trials. It had been said that Australia had only one misfortune, it was too prosperous, and life was too easy, but many this year would be inclined to dispute this doctrine. The only thing certain about the next centenary was that none of us would be there to see it. He had been asked whether he thought that in the next 100 years Australia would be independent. He answered that he did not know. Neither did he care much about the matter. It mattered little what flag she was under. If the people were intelligent and moral they would be a great people, and it would not matter whether they lived under a king or a president. Australia would never cease to congratulate itself upon the fact that it was heir to the name and fame of the British people. We could never separate from our forefathers; we could never separate from their greatness, from their literature, from their language, and from what they had done, because what they were was in us. (Applause.) Therefore, what matter if nominal independence or nominal separation took place—Australia and Great Britain must remain identified for ever. (Applause.)

PROFESSOR SCOTT said it was his pleasant duty to propose the toast of "The Medical Societies"—in particular the New South Wales Branch of the British Medical Association, and the Medical Section of the Royal Society, whose president and chairman they had to thank for the generous hospitality which had brought them together under such pleasant circumstances. A gathering such as that enabled them to appreciate the collective strength and solidity of the medical profession in Sydney. What the community owed to the practical activity of the profession it would be superfluous to describe. It was enough to say that without the help of the medical profession they could neither come into the world, live in it, nor, as a rule, leave it. (Laughter.) But the medical societies represented the profession rather on its theoretical or scientific side. The physician and surgeon, whatever else he might be as well, must be a man of science; and in the great army of seekers after truth, the medical profession was by no means the least powerful and well-organised contingent. It was on this ground that a medical school was rightly regarded as an essential part of any University that aspired to completeness; and we had reason to congratulate ourselves that in our own University we

possessed a thriving medical school, one that formed no mere appendage, but a constituent part of the University itself, and one that had already proved itself well able to hold its own. Such a close association of those engaged in the pursuit of different branches of knowledge could only be for the benefit of all alike; for each had much to learn from the rest, and no branch of study, whether literary, historical, or scientific, had any claim to precedence over others. Each individual worker was naturally and rightly most interested in the branch of study in which his own work lay, and most of them perhaps were at times tempted to underrate the comparative importance of others. But if those whose special subject lay on the side of literature and history and philosophy were sometimes inclined to push too far the doctrine that "the proper study of mankind is man," they do well to remind themselves that the sciences of inanimate and organic nature, if they seemed to stand lower in directly human interest, enjoyed the compensating advantage of greater definiteness and certainty. The truth was that there can be no greater mistake than to regard the different branches of study as rivals or competitors, as though the interests of one could only be served by damaging those of the other. It was not more of the one and less of the other that we wanted, but more of both—as much as possible of both. It was true that the individual student must to some extent make his choice between them, since (in the words of a great doctor of medicine) "Art is long and life is short;" but let them have full opportunities for study on both sides. There should be no needless instruction on the one side or the other. But while no degrees of rank among the various departments could be admitted in the republic of knowledge, the science of medicine, like others, had its special advantages. Perhaps there was none which afforded more points of contact with other sciences, or gave less encouragement and less excuse for narrowness or one-sided exclusiveness than the science of medicine, situated as it was close to the border-line where the sciences of material nature approached the domain of humanity; and the worker in the science of medicine pursued his work under the most stimulating of all possible conditions—conditions under which every fresh truth discovered was immediately and directly applicable to the diminution of suffering and misery. As bodies which exist for the advancement of this science, he proposed the toast of "The Medical Societies."

The Hon. Dr. RENWICK responded on behalf of the New South Wales branch of the British Medical Association. He said that medical men required to know of the advancement of science and of the doings of their brothers abroad. He knew no better way of doing this than by becoming a member of these societies. Reference had been made to the necessity for controlling the practice of their profession to some extent. What was the use of having a University in this colony or founding a medical school if on all hands they were to receive competition from men who knew nothing whatever of their profession, and were ignorant in many cases of the rudimentary education attaching to it? Attempts had been made in the Legislature from time to time to introduce bills with regard to the matter. It depended on the profession whether such a bill would be carried or not. The profession must be united on the subject. There must be no disagreement when a bill was brought forward. There were enemies enough outside the profession—in both Houses—and with a divided profession no proper result could be obtained. He hoped the medical profession would agree as to the principles to be incorporated into a bill, and

if they were so united there could be no doubt that success would attend their efforts. In Victoria the profession were united, and were successful. In all the world, he knew of no such forsaken place for the profession as New South Wales. (Applause.) If our records and statistics were to be true, then it was absolutely necessary that a medical man—that was, a qualified medical man—should give a certificate as to the nature of death; but this was not required by the law in this country. (Shame.) Any man—it did not matter what his business—if he liked to call himself a doctor, had as much right to give this certificate as anyone he now saw before him. This was a most disgraceful thing in connection with their profession, and he did not think an equal could be found for it in any part of the world. Let them make up their minds as to the necessary points for a medical bill, present it to Parliament, and if they were united he had no doubt they would be able to carry it out. (Cheers.)

Dr. KNAGGS formally responded on behalf of the medical branch of the Royal Society.

Professor ANDERSON STUART proposed "The Public Medical Services," coupling with the toast the names of Dr. Manning for the Lunacy Department, and Dr. M'Laurin for the Health Department. Both gentlemen acknowledged the compliment, and the latter made reference to the necessity for a Public Health Bill, which he hoped might soon become law. Dr. Williams was also called for, and replied as Medical Officer to the Forces.

Dr. SYDNEY JONES proposed "Our Guests," to which Mr. Justice WINDEYER and Sir WM. MANNING responded.

Mr. Justice WINDEYER gave "Our Hosts," and on behalf of the visitors warmly thanked the medical profession for their invitation.

The CHAIRMAN, in response, said it gave them the greatest pleasure to have visitors with them that day. Gatherings of this kind could not fail to be of the greatest benefit, and if they were continued from time to time the benefit would be increased, as they would then be brought face to face and hand to hand with each other, and get to know each other better. (Applause.)

Dr. CRAGO proposed "The Press." The Hon. J. M. CREED responded on behalf of the professional, and Mr. J. R. FAIRFAX and Mr. BREWER on behalf of the daily press.

The various speeches were interspersed with songs by eight members of the Metropolitan Liedertafel, who were present as guests, as well as music from both the Artillery Band and the Vernon boys.

After luncheon the party returned to the boat, and arrived in Sydney about half-past six o'clock, after a most enjoyable outing.

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FOR TRANSFER.—A medical practice in South Australia, only condition being purchase of doctor's residence. Terms very easy. Climate excellent. Address, A.E., *Australasian Medical Gazette* Office, Sydney.

MR. BRUCK has received a supply of BIDETS, WITH VAGINAL DOUCHES, ON FOLDING IRON STANDS, similar to fig. 1770 on page 618 in Arnold's Catalogue. The apparatus is made of strong tin, galvanised inside, the outside being enamelled in imitation of wood. Complete, with nickelled pump, enamelled top, and folding iron stand. Price, 45s. (London price, 70s.)



## REVIEWS.\*

THE EXTRA PHARMACOPŒIA. By MARTINDALE AND WESTCOTT. (H. K. LEWIS, LONDON, 5TH ED., 1888.)

THIS well-known and popular pocket companion needs no better recommendation than the appearance of a fifth edition in five years. This has been purged by the omission of some of the less important matter, while it has at the same time been amplified and extended by the addition of new matter and the incorporation of what is valuable among the more recent preparations and formulæ.

Official revisions of the Pharmacopœia are much too infrequent to keep pace with the rapid therapeutic and pharmaceutical advances of these years, and some supplementary work like the present has become almost a necessity.

DISEASES OF WOMEN. By A. H. N. LEWERS, M.D., ETC.

ANÆSTHETICS. By DUDLEY BUXTON, M.D., ETC. (H. K. LEWIS' PRACTICAL SERIES, LONDON, 1888.)

THE first of these latest additions to this useful series of manuals is especially deserving of notice, though it certainly cannot be said to follow a deserted path in medical literature. This, however, seems almost an ideal book for the student of medicine in its reasonable compass, in its clearness of arrangement—including subdivision and typography—in directness of statement and general intelligibility.

But it also sustains in a high degree the claim to be one of a *practical series*.

The paragraphs on differential diagnosis and on treatment are just what the practitioner—especially the junior practitioner—most requires. They are clear and concise, and their matter is thoroughly up to date. With such a hand-book there is little excuse for failing to keep abreast of the times in this department.

The teachings in uterine displacements are well worthy of perusal by those trained at a time when these were held to be the cause of the majority of gynecological ills. This phase of gynecological fashion is distinctly on the wane.

With regard to Apostoli's electrical treatment of fibroids, the author wisely recommends suspension of judgment while he gives a good account of the methods employed.

\* Copies of these books may be obtained, at published prices, from Mr. L. Bruck, Medical Bookseller, Sydney.

Of the second member of the series here noticed, it may be said that, unlike the first, it has comparatively few competitors. This short treatise of 150 pp. on anæsthetics should be in the hands of all general practitioners. It seems a pretty complete compendium of information on the subject, both on its purely scientific, and on its practical side.

## THE MONTH.

## NEW SOUTH WALES.

AT a special meeting of the Senate of the University of Sydney, held at the Royal Society's rooms on November 27, the following motion, moved by Dr. Sydney Jones, and seconded by Professor Anderson Stuart, was carried:—"That the resolution of the senate of October 1, deciding on the retention of the first year of arts in the case of medical students in accordance with by-law 91 of the year 1882, be rescinded."

AT a recent meeting of the Senate of the University of Sydney a letter was received from Dr. F. Norton Manning, stating his inability to continue to perform the duties of Lecturer in Psychological Medicine after the present year. It was resolved that Dr. Manning's resignation be accepted with regret, and that a letter of thanks for his past services be transmitted to him. A letter was also received from Sir Alfred Roberts, in which he stated he would be unable to act as Examiner in Surgery this year. It was resolved that Dr. A. MacCormick be added to the list of Examiners in Medicine, and that he be requested to examine in surgery in the forthcoming examination.

AT a meeting of the Senate of the Sydney University, held on November 19, the following Examiners were appointed to act with the respective Lecturers in the forthcoming examination of medical students:—*Materia medica*, Dr. George Bennett; *pathology*, the Hon. Dr. Renwick; *midwifery, &c.*, Dr. P. Sydney Jones; *medical jurisprudence*, the Hon. Dr. Mackellar; *medicine*, Dr. C. M'Kay; *surgery*, Sir Alfred Roberts; *psychological medicine*, Dr. MacLaurin.

THE proposed new rules and regulations of the Sydney Hospital provide for the appointment of a Medical Superintendent at a salary of £500 per annum, with quarters and rations, and the reduction of the salaries of the Resident Medical Officers from £250 to £100 per annum.

DR. C. A. EDWARDS has removed from Manly to Waverley, a suburb of Sydney.

HURST, GEORGE, M.B. et Ch.M. Edin., elected Honorary Physician of the Sydney Hospital, vice Dr. F. Ashwell, resigned.

DR. E. J. JENKINS has been re-appointed to the office of Medical Tutor at the University of Sydney.

DR. A. A. JOHNSTON has removed from Parkes to Moruya.

DR. S. T. KNAGGS has been appointed Lecturer in Clinical Surgery, and Dr. R. Scot-Skirving Lecturer in Clinical Medicine, at the Sydney University.

DR. H. N. MACLAURIN, Vice-chancellor of the University of Sydney, who will shortly take a trip to Europe, entertained a number of gentlemen at dinner in the great hall of the University on November 30.



DR. W. W. SPENCER, of Bathurst, has been elected President of the local Philharmonic Society.

DR. ROBERT H. TODD has removed from Waverley to Queen Anne Chambers, Bond-street, Sydney. He has given up general practice, and has determined to work at the administration of anaesthetics for the profession.

#### NEW ZEALAND.

THE Immigration Barracks at Addington, near Christchurch, have been proclaimed a lunatic asylum.

THE hospital at the Sanatorium Grounds, Rotorua, the property of the Government, was burned down on November 24. The patients were rescued with difficulty. The loss amounts to about £5,000. The property was uninsured. The fire was accidental.

DR. P. T. BOLGER has settled at Akaroa, 56 miles S.E. of Christchurch.

DR. K. G. T. BRANTING has resigned his commission of Honorary Surgeon to the Woodville Rifle Volunteers.

DR. J. W. KEYWORTH, of Wairoa, Hawke's Bay, has been left a legacy of £500 by a lady patient.

DR. MALCOLM WEBB has settled at Cromwell, the centre of an important gold-mining district, 165 miles N.W. of Dunedin.

#### QUEENSLAND.

THE Government have requested Drs. Thomson and Tilston to assist Drs. Germent and Loir in their cultivation of virus as a specific for pleuro-pneumonia.

DRS. H. CLATWORTHY and S. W. SPARK, of Townsville, have been elected Medical Officers to the local Friendly Societies' Union, in which eight lodges are co-operating.

DR. ERNEST HUMPHREY, late of Mackay, has removed to Townsville.

DR. C. F. MARKS, of Brisbane, has been appointed a member of the Legislative Council.

DR. JAMES MILNE has removed from Windorah to Birdsville, on the Diamantina River, near the South Australian border, about 1000 miles W. of Brisbane.

DR. F. H. SIMMONS, late of Strathfield, near Sydney, has commenced practice in Brisbane.

#### SOUTH AUSTRALIA

DR. E. C. STIRLING and Dr. J. A. COCKBURN, of North Adelaide, have been appointed members of the Council of the School of Mines and Industries. Dr. Cockburn, at the express wish of that council, will act as Chairman.

The Government have considered the report of the Civil Service Commission into the management of the Mount Gambier Hospital, with the result that they decided to suspend Dr. A. W. Powell, the Resident Medical Superintendent, who, however, has the right under the Act to claim a board of inquiry.

IN the House of Assembly, on November 27, the Hon. T. Playford stated, in reply to Mr. Horn, that the Government were satisfied with the zeal and efficiency with which the Honorary Medical Officers of the Adelaide Hospital were discharging their honorary duties.

DR. P. M. WOOD, of Port Darwin, Government Medical Officer for the Northern Territory, has wired to the Central Board of Health suggesting the appointment

of sanitary inspectors for new townships, particularly Burrundie, where sanitary laws were being totally disregarded.

DR. THOMAS CASSELLS, M.D. et Ch.M. Glas., 1881, was found dead in his surgery on Tuesday afternoon, November 13. The deceased gentleman, who arrived in the colony five years ago, was discovered lying on the floor, fully dressed. The body was cold and rigid, and must have been dead for hours. He was a surgeon in the South Australian Volunteer Force, a Public Vaccinator, and Medical Officer to the Destitute, Poor, and Aborigines within his district.

#### TASMANIA.

DR. J. MCCALL, of Ulverstone, has been elected a member of the House of Assembly for the electoral district of West Devon.

DR. A. B. MORRIS has removed from Hamilton to Deloraine.

#### VICTORIA.

A MEETING of the two medical societies of Victoria was held on November 28th, at the Medical Hall in Albert-street, East Melbourne, for the purpose of discussing the desirability of taking steps to obtain an amendment of the Medical Practitioners' Act, with a special view to the repression of practice by unqualified persons. Dr. J. P. Ryan presided, and there was a very large number of members of the profession in attendance. The proceedings were opened by Dr. Youl, who stated that in his capacity of President of the Medical Board he had recently requested the Chief Secretary, as head of the police department, to prosecute a person who was practising in Victoria illegally, and had received a reply to the effect that it was no part of the duty of the police to prosecute in such cases, but that the medical societies could do so. A resolution was then proposed by Dr. Neild, and seconded by Dr. M'Gillivray, that fresh legislation ought to be passed, and the motion was carried unanimously. Another resolution was proposed by Dr. J. Robertson, and seconded by Dr. Bird, that a draft bill to amend the Medical Practitioners' Act, 1866, which was issued by the Medical Board of Victoria 12 months ago, should be recommended for adoption by the Government. A discussion ensued on the motion, during which several members stated that they thought the draft bill should be circulated amongst the profession before it was adopted by them. Dr. Neild and other gentlemen explained that the draft bill had been before the medical societies and the profession for the last 15 or 20 years, and that it had been thought they were all aware of its contents. An amendment by Dr. Allen, "that the consideration of the necessary legislation be referred to the councils of the two medical societies, with a request that a report be submitted to a general meeting of the societies at as early a date as possible," was eventually agreed to, and the meeting then closed.

IN the Legislative Assembly on November 27, Mr. M'Intyre asked the Chief Secretary if it was a fact as reported that instructions had been given the police not to prosecute persons illegally practising the medical profession. Mr. Deakin, in reply, said his authority was asked to enable the police to prosecute unregistered persons who were practising the medical profession, and he at once intimated that it was not the duty of the police or of the Government to undertake the prosecution. Any private person might institute an action against an unregistered practitioner.

ON December 4, Mr. McIntyre again brought up the question of the non-interference by the police with unregistered medical practitioners, and asked the Chief Secretary to withdraw the directions given to the police that they were not to proceed against such persons. Mr. Deakin refused to do so, and repeated his opinion that it was no part of the duty of constables to take action against individuals practising illegally, and it was not a duty such as they should be called upon to discharge.

At a meeting of the Committee of Management of the Alfred Hospital, held on November 16, Dr. W. H. Embling, chairman, Dr. Rudall and Dr. Schlesinger, members of the Hon. Medical Staff, were present at the request of the managers, in order to state their several views regarding the proposed necessary additions to the hospital in view of the increase of patients and the establishment of the Clinical School. On behalf of the out-patients, Dr. Schlesinger urged that another room for dressing purposes and to prevent the intermixing of male and female patients, together with improved lavatory accommodation, was required. Dr. Rudall, representing the surgical side of the house, complained of the light in the operating theatre being bad, and stated that from want of beds he was frequently obliged, in order to make room for new patients, to send away patients whom he would like to have kept a little longer. Dr. Embling, on behalf of the specialists, insisted that each of them should have a room assigned to him in which to examine the patients, test the sight, &c., and not be obliged, as at present, to treat their several patients in the general ward. The managers considered the requests reasonable, and professed their readiness to carry out the wishes of the staff whenever funds would permit. Meanwhile it was agreed that the more urgent requirements should at once be attended to.

ON Wednesday afternoon, November 21, Lady Loch laid the foundation-stone of the new Melbourne Convalescent Home for Women. The original site of 11 acres at Oakleigh was sold early this year for £10,000, and the committee purchased 20 acres of land at Clayton Hill, where the ceremony was performed.

It is proposed to establish a temperance hospital in Melbourne, for which purpose a fund of £1,500 is now available.

Dr. W. H. STOCK, medical practitioner, residing at Clifton-hill, near Melbourne, was charged at the Northcote Police Court, on October 29, with having made a false declaration touching the death of Louisa Jane Richardson, formerly residing in Merri-street, Northcote. The cause of death was assigned to be "convulsive fits." A second charge was that a false statement had been made by Dr. Stock "that the duration of the illness was three weeks." The third charge was that the defendant stated that he had attended the deceased, who died on August 2, whereas it would be shown that the defendant had refused to attend her for three days prior to death. The proceedings were instituted under the 21st section of "Registration of Births, &c., 1886," and Mr. Mackinnon appeared for the plaintiff, and Mr. W. Madden for the defendant. Several medical witnesses were in attendance to give expert evidence, and Mr. Mackinnon having formally stated the case, Mr. Madden submitted that it could not be considered in its present stage. The section alluded to applied to persons going before a registrar and making a false declaration. Mr. Mackinnon admitted that there was a good legal point, but would like the point to be argued before a superior tribunal. The spirit of the Act had been departed from. The Bench, having consulted and studied the clauses of the Act, decided to strike out the case.

At a meeting of the Intercolonial Temperance Convention, held in Melbourne on November 22, the Hon. Dr. S. J. Magarey, M.L.C., of Adelaide, read a paper on the medical aspect of temperance. He said that until physiology had shown the true action of alcohol upon the healthy human body the medical uses of it must remain largely empirical. Thoughtful and conscientious physicians, if it could be proved from experience that alcohol was of use as a medicine, could not refuse to prescribe it under certain conditions. The only use which he himself made of alcohol was as a cardiac stimulant, and for this purpose it was invaluable. In the nature of things, however, its action could be but temporary and ephemeral. Alcohol was also an anti-spasmodic, but there were better anti-spasmodics that could be resorted to. The paper set forth the general rules which should guide patients in using alcohol medicinally.

We regret to have to record the death of Mr. Tudor Hora, M.B.C.S. Eng., L. et L. Mid. F.P.S. Glasg., 1864, L.S.A. Lond., 1865, who died at Normanby House, Freeman-street, North Carlton (Melbourne), on November 22, at the age of 51. The deceased gentleman was the fifth son of Dr. James Hora, of Nottingham, Kensington, England; he arrived in Western Australia in 1873, and practised at Perth for five years, when he left for Victoria. On his arrival in Melbourne, in December, 1878, he commenced practice in Lygon-street, Carlton, and in 1884 he removed to Dromana, a watering place 47 miles S. of Melbourne, where he continued to reside till last year, when he removed to Dimboola, in the Wimmera district, where he practised up to within a few weeks of his death.

DRS. ANDERSON and MINCHIN, Resident Surgeons of the Women's Hospital, Melbourne, have been censured by the Board of Management for admitting a case of puerperal fever.

DR. LOUIS BECKETT has commenced practice at Inglewood, a gold-mining township 131 miles N.W. of Melbourne.

DR. F. P. DESHON, the Medical Superintendent of the Beechworth Lunatic Asylum, was presented on November 27, by the staff of the asylum, with an illuminated address and a portrait of himself, the occasion being his resumption of duty upon his return from a visit to England.

DR. E. G. LEGER ERSON, late of Parnell, Auckland, has commenced practice at Greville-street, Prahran, a suburb of Melbourne.

DR. A. S. JOSKE, of Prahran, has been appointed a Surgeon on probation in the Victorian military forces, with the relative rank of captain.

DR. R. W. LETHBRIDGE, late of Hamilton, Tasmania, has settled at Ballan, 45 miles N.W. of Melbourne.

DR. J. W. MARTIN, of Albert-road, South Melbourne, has removed to Creswick, where he has been elected Resident Medical Officer of the local district hospital, in the place of Dr. Tremearne, resigned.

PROFESSOR D. O. MASSON, M.A., D. Sci., has been appointed a member of the Central Board of Health of Victoria, vice Mr. W. M. Fehon, resigned.

DR. H. A. REED, formerly of Waipawa, N.Z., has settled at "Rosehill," Caulfield, a suburb of Melbourne.

DR. F. E. CORBETT SINGLETON has commenced practice at 15 Spring-street, Melbourne, as a specialist for diseases of the ear, throat, and nose.

## WESTERN AUSTRALIA.

DR. J. R. M. THOMSON, of York, has been appointed to act as Resident Magistrate, Magistrate of the Local Court, and Sub-collector of Internal Revenue, at York.

DR. EDW. SCOTT, M.L.C., has been elected Mayor of Perth.

## PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners by the respective Boards:—

## NEW SOUTH WALES.

Healey, Michael, L.R.C.S. Irel., 1874; L. & L. Mid. K. & Q. Coll. Phys. Irel., 1875.  
 MacDonald, Thomas Fauset, M.B. & M.S. Univ. Glasg., 1882.  
 Woodford, Alfred Ernest, L.R.C.P. & S. Edin., 1884.  
 Moore, John Irwin, L.R.C.S. Irel., 1884; L. & L. Mid. K. & Q. Coll. Phys. Irel., 1887.  
 Gibson, John, M.D. Univ. Edin., 1839; M.B. & C.M. Univ. Edin., 1879.  
 Morice, Robert James, M.B., M.S. Univ. Aberd., 1874; M.D. Univ. Aberd., 1878.

For additional registration:—

Armstrong, William George, M.S. Univ. Sydney, 1888.

## NEW ZEALAND.

Orpen, Arthur Herbert, L.R.C.S. Edin., 1868; M.K.Q.C.P. Irel., 1880.  
 Caltan, William James, M.B. & Ch.M., Edin.  
 Webb, Malcolm, M.D. Lond., 1884; M.R.C.S. Eng., 1882.

## QUEENSLAND.

Nisbet, Walter Blake.  
 Simmons, Fourness Henry, M.B. & Ch.M. Edin.  
 Wilkie, David William Balfour, M.B. Melb., 1878; M.R.C.S. Eng., 1876.

## VICTORIA.

Mahony, Laurence Francis, L.S.A. Lond., 1875; M.R.C.S. Eng., 1876; M.B. Durham, 1878.  
 Gibbes, John Murray, M.B. & Ch.M. 1866; M.D. 1883, Aberd.; M. 1865, L.Mid. 1866, R.C.S. Eng.  
 Minchin, Edward James, L.R.C.S. Irel., 1884; L.K.Q.C.P. Irel., 1884.  
 O'Sullivan, Edward Francis, M.D. & Ch.M. R. Univ. Irel., 1886; L.Mid. K.Q.C.P. Irel., 1887.  
 Moore, George Richmond, M.R.C.S. Eng., 1878.  
 Greville, Sampson John Rodger, M.R.C.S. Eng., 1888; L. & L.Mid. R.C.P. & R.C.S. Edin., 1886; L.F.P.S. Glas., 1886.  
 Wilson, Samuel, M.D. & Ch.M. R. Univ. Irel., 1885; L.Mid. K.Q.C.P. Irel., 1886.  
 Lethbridge, Robert Wellesley, M.B. & Ch.M. Edin., 1880.  
 Beckett, Louis, L.S.A. Lond., 1887; M.R.C.S. Eng., 1888; L.R.C.P. Lond., 1888.

Additional Qualifications Registered:—

O'Hara, Henry M., F.R.C.S. Irel., 1888, and M.K.Q.C.P. Irel., 1888.

## MEDICAL APPOINTMENTS.

Beckett, Louis, M.R.C.S.E., L.R.C.P. Lond., to be Public Vaccinator at Inglewood, Vic.  
 Bolger, Patrick Thomas, L.R.C.S. Irel., L.K.Q.C.P. Irel., to be Public Vaccinator for the district of Akaroa, N.Z.  
 Carolan, James Frederick, M.R.C.S. Eng., to be a Public Vaccinator for the districts of Albertland, Mangawai, and Matakana, N.Z.  
 Deane, Charles Maalen, M.D., M.R.C.S.E., to be Health Officer for borough of Geelong West, Vic., vice Dr. E. J. Walshe, resigned.  
 Henry, Arthur Geddes, M.B. Syd., appointed Resident Medical Officer at the Sydney Hospital, vice Dr. G. Hughes, resigned.  
 Hill, Alfred William, M.D. Brux., L.R.C.P. Lond., M.R.C.S.E., to be Health Officer for Torowhe, S.A.  
 Lethbridge, Robert Wellesley, M.B. & Ch.M. Edin., to be Public Vaccinator at Ballan, Vic.  
 Macfarlane, Archibald Martin, M.B. Melb., to be Public Vaccinator at Wangaratta, Vic., vice Dr. W. J. Carroll, resigned.  
 Main, Harry Findlay, M.B. & Ch.B. Melb., to be Health Officer for borough of Malmesbury and North Riding of shire of Glenlyon, Vic.

Markham, William, M.D., to be Officer of Health for Port Augusta West, S.A.  
 Martin, John Wilson, M.B. & Ch.M. Edin., L.R.C.P. & R.C.S. Edin., L.F.P.S. Glas., elected Resident Medical Officer to the District Hospital, Crewick, Vic.  
 Parsons, Harry Compton L.R.C.P., Lond., M.R.C.S.E., to be Honorary Surgeon of the Kaiapoi Rifle Volunteers, N.Z.  
 Ross, William Chisholm, M.B. & Ch.B. Melb., to be Government Medical Officer and Vaccinator for the district of Burriowie, N.S.W.  
 Semple, William Macphun, M.B. & Ch.M. Glasg., to be Government Medical Officer and Vaccinator for the district of Willcannia, N.S.W., vice Dr. J. S. Wilson, resigned.  
 Smith, Robert, F.R.C.S. & L.R.C.P. Edin., to be Public Vaccinator for the district of Impression Bay, Tasmania.  
 Stevenson, Ralph Drummond, M.B. & Ch.M. Glasg., to be Health Officer for East and West Ridings of shire of Glenlyon, Vic.  
 Thorp, Charles Gabourel, M.B. & Ch.M. Edin., to be Government Medical Officer and Vaccinator for the district of Dowling, N.S.W.

## BIRTHS, MARRIAGES, AND DEATHS.

\* \* The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamp with the announcement.

## BIRTHS.

ASHWELL.—November 1, at Glebe-road, Sydney, the wife of F. Ashwell, M.B., Ch.M., of a daughter.  
 CARROLL.—On the 30th November, at Wangaratta, Victoria, the wife of Dr. W. J. Carroll—a son.  
 CRIVELLI.—On the 17th November, at Albert-park, South Melbourne, the wife of Dr. M. Crivelli, of a son.  
 DOBBIN.—On the 9th November, at Brunswick, Melbourne, the wife of W. Sinclair Dobbin, F.R.C.S.I.—a daughter.  
 JONES.—November 27, at Ashfield, near Sydney, the wife of R. Theo. Jones, M.D., of a daughter.  
 STEVEN.—On the 28th November, at Auburn, Victoria, the wife of Alex. Steven, M.D., M.R.C.S., of a daughter.  
 STEVENSON.—October 28, at Soone, New South Wales, the wife of Frederick C. Stevenson, surgeon, of a son.  
 THOMSON.—On the 17th November, at South Yarra, Melbourne, the wife of Dr. M. Barclay Thomson—a son.  
 TILSTON.—On the 15th November, at Wickham-terrace, Brisbane, the wife of Dr. Tilston, of a son.  
 YEATMAN.—On the 9th November, at Auburn, South Australia, the wife of Dr. Yeatman, of a son.

## MARRIAGES.

BARRETT—PIRANI.—On the 31st October, at South Yarra, by the Rev. Chas. Strong, Dr. J. W. Barrett, of Collins street east, Melbourne, to Marian, widow of the late Frederick J. Pirani.  
 BOND—CRISP.—On October 37, at St. Sepulchre's Church, Auckland, John H. Bond, M.B., C.M., to Annie Alice Crisp.  
 COLE—JENNER.—On the 31st October, at Mornington, Victoria, by the Rev. Thomas Quinton, Frank Hobill Cole, M.B., B.S., of Carlton (Melbourne), to Alice Flude, second surviving daughter of the Hon. C. J. Jenner.  
 CUTTS—RANKIN.—On the 25th October, at the Presbyterian Church, St. Kilda, by the Rev. Samuel Robinson, William Henry Cutts, jun., M.B., & Ch.B., Oakleigh, Victoria, to Jean, fifth daughter of W. B. Rankin, F.R.C.S.E., St. Kilda.  
 INGLIS—ANDERSON.—On the 22nd November, by the Rev. A. Marshall, Scots Church, Edgar M. Inglis, M.B., Ch. M., &c., of Kew, Melbourne, to Annie, second daughter of the late Charles Anderson, Esq., of Jedburgh, Scotland.  
 SALMON—WALTER.—On the 25th October, at the Catholic Apostolic Church, Carlton (Melbourne), Henry Robert Salmon, M.B. & Ch.B., of Ballarat East, to Alice, third daughter of John Walter, East Melbourne.

## PUBLICATIONS RECEIVED.

*The Treatment of Empyema*: The process of repair. A method of subcutaneous drainage and irrigation. By G. J. Robertson, M.B., C.M., Surgeon to the Oldham Infirmary. Manchester, 1888.

*Elements of Practical Medicine*. By Alfred H. Carter, M.D., Lond. 5th edition. London: H. K. Lewis, 1888.

*A Manual of Ophthalmic Practice*. By Chas. Higgins, F.R.C.S.E., Ophth. Surgeon to Guy's Hospital, &c. Illustrated. London: H. K. Lewis, 1888.

*The Treatment of Pharyngeal Catarrh*. By H. J. Beebag, B.A., Sydney, M.B., Ch.M., Edin. Reprint,

## REPORTED MORTALITY FOR THE MONTH OF OCTOBER, 1888.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from										
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.	
N. S. WALES.															
Sydney .....	132,846	276	161	65	...	...	3	...	2	3	15	15	5	...	
Suburbs .....	215,849	849	350	178	2	6	22	...	1	17	29	26	14	3	
NEW ZEALAND.															
Auckland .....	35,639	86	26	8	...	...	...	1	1	...	4	2	1	2	
Christchurch ..	16,217	49	14	6	...	...	...	1	...	...	1	1	...	...	
Dunedin .....	24,334	35	23	5	...	...	...	...	1	...	3	2	2	...	
Wellington .....	28,235	101	27	11	...	...	1	...	...	...	2	1	5	2	
QUEENSLAND.															
Brisbane .....	51,689	237	121	68	}	...	3	...	3	44	10	8	3	2	
Suburbs .....	21,960	111	49	36		...	...	...	...	...	...	...	...	...	...
SOUTH AUSTRALIA .....	311,296	898	274	86	...	...	21	...	4	3	35	25	12	3	
Adelaide .....	43,527	96	49	9	...	...	1	...	1	...	12	6	3	...	
TASMANIA.															
Hobart .....	31,915	82	56	9	...	...	...	...	...	...	6	7	3	1	
Launceston .....	20,090	75	9	3	...	...	...	...	...	...	1	1	...	...	
Country Districts .....	92,703	297	77	...	...	...	5	...	1	1	...	...	...	...	
VICTORIA.															
Melbourne .....	69,774	184	84	} 197	3	2	20	...	10	9	86	34	19	7	
Suburbs .....	275,606	1,284	486		...	...	...	...	...	...	...	...	...	...	...

## METEOROLOGICAL OBSERVATIONS FOR OCTOBER, 1888.

STATIONS.	THERMOMETER.					Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.			Depth.	Days.		
							Inches			
Adelaide—Lat. 34° 55' 33" S.; Long. 138° 36' E. ....	...	91.9	62.8	41.5	80.033	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S.; Long. 174° 49' 2" E. ....	128.7	67.7	56.7	40.7	...	...	3.530	15	72	...
Brisbane—Lat. 27° 28' 3" S.; Long. 153° 16' 15" E. ....	146.7	90.4	69.2	54.6	80.100	0.771	10	65	...	...
Christchurch—Lat. 43° 32' 16" S.; Long. 172° 38' 59" E. ....	146.6	76.4	53.1	29.2	...	0.766	11	60	...	...
Dunedin—Lat. 45° 52' 11" S.; Long. 170° 31' 11" E. ....	125.7	73.7	51.7	34.7	...	1.934	13	70	...	...
Hobart—Lat. 42° 53' 32" S.; Long. 147° 22' 20" E. ....	...	80.3	52.7	34.7	29.935	1.59	19	68	...	...
Launceston—Lat. 41° 30' S.; Long. 147° 14' E. ....	...	76.7	55.8	33.7	30.004	0.57	4	57	...	...
Melbourne—Lat. 37° 49' 54" S.; Long. 144° 58' 42" E. ....	...	86.7	56.1	35.1	30.046	1.35	8	...	...	...
Sydney—Lat. 33° 51' 41" S.; Long. 151° 11' 49" E. ....	...	85.5	62.6	49.6	30.097	1.61	12	63	N.E.	...
Wellington—Lat. 41° 16' 25" S.; Long. 174° 47' 25" E. ....	135.7	67.7	52.8	39.5	...	3.373	13	79	...	...

# IAN MEA

AUSTRALIAN ASYLUMS DU				THE PROPORTION (PER			
Portion (per cent) of Epileptics and				Admitted.			
General Part				Epileptics.			
Female		Male		Total		Female	
0.5	4.3	8.1	7.2	4.3	8.1	7.2	4.3
...	1.6	5.6	5.7	1.6	5.6	5.7	1.6
2.1	2.5	4.3	5.4	2.5	4.3	5.4	2.5
...	1.5	5.8	8.2	1.5	5.8	8.2	1.5
...	11.4	8.4	8.3	11.4	8.4	8.3	11.4
...	...	...	...	...	...	...	...
0.4	2.8	6.3	6.4	2.8	6.3	6.4	2.8
0.6	4.3	2.8	1.8	4.3	2.8	1.8	4.3
3.0	14.3	9.0	7.5	3.0	14.3	9.0	7.5

The first point I shall mention here is the proportion of insane to population:—  
On Dec. 31, 1887, (and I may mention here

† One in 349 in Australia, as against 1 in 342 in Great Britain and Ireland.

§ Table I.

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2MBER, 1887.

NEW At CE Dr W	Percentage for all Brazilian Colonies (ex- Western Australia.)			NEW ZEALAND.		
	le.	Female.	Total.	Male.	Female.	Total.
QUEEN Br Su	32	45.44	39.66	40.39	48.75	43.61
1	77	6.72	5.55	9.41	8.12	8.91
59	52.16	45.22	49.80	56.87	52.52	
SOUTH Ad	36	43.64	42.09	29.18	34.97	31.20
TASMANIA Hq La	38	9.04	6.97	7.57	10.36	8.65
15	52.68	49.07	36.75	45.33	39.85	
Counts	10	6.24	7.42	7.15	4.40	6.13
VICTORIA Me Suk	9	5.52	7.09	6.85	4.16	5.94

	Total.	Deemed Curable.	Per- centage.	Deemed Incur- able.	Per- centage.	TOTAL.
Adelaide						
Auckland	2,821	521	18.46	2,300	81.53	2,821
Brisbane	3,519	319	9.06	3,200	90.93	3,519
Christchurch	750	199	26.53	551	73.46	750
Dunedin	874	94	10.75	780	89.24	874
Hobart	350	43	12.28	307	87.71	350
Launceston	121	12	9.91	109	90.08	121
Melbourne						
Sydney						
Wellington						

Lat. 33° 51' 41" S.; Long. 151° 11' 49" E. ....	...	85.5	62.6	49.6	30.097	1.61	12	63	N.E.
Lat. 41° 16' 25" S.; Long. 174° 47' 25" E. ....	135	67	52.8	39.5	...	3.373	13	79	...

# AUSTRALASIAN MEDICAL GAZETTE.

## ADDRESS IN SECTION OF PSYCHOLOGICAL MEDICINE "ON LUNACY IN THE AUSTRALIAN COLONIES."

DELIVERED AT THE INTERCOLONIAL MEDICAL CONGRESS IN MELBOURNE, ON JANUARY 11, 1888.

By F. N. MANNING, M.D., INSPECTOR-GENERAL OF THE INSANE IN NEW SOUTH WALES, AND LECTURER ON PSYCHOLOGICAL MEDICINE IN THE UNIVERSITY OF SYDNEY.

In taking this chair I have first to acknowledge the courtesy and consideration which induced the Council of the Congress to select as the President of this section the senior officer of the Lunacy Department of the mother colony, and next—it being my good fortune to occupy this position—to express my personal gratification at presiding over the first session of the important section of psychological medicine.

The choice of a subject on which to address you required some thought and consideration. I could scarcely hope to say anything very new or very interesting on the more abstract and scientific questions pertaining to our specialty, and remembering that this is our 100th birthday, it occurred to me that I might with interest to you, and possibly with interest and advantage to those who may come after us, review our present position in regard to lunacy matters in Australia; set up in fact a sort of mile-stone on which to record our position and progress; and then, if time permits, indicate some of the steps which it behoves us to take on our path onward.

I shall trouble you as little as possible with statistical details, beyond what are necessary to bring out and make clear the more salient and important facts, and shall relegate to an appendix, various tables and returns, which are of considerable interest, and for the means of compiling which I am indebted to my confrères and co-workers—the heads of the Lunacy Departments in the various Australasian colonies. The returns from New Zealand are given separately. It is much to be regretted that the statistics from Western Australia are so imperfect as to be useless, except on one or two main points; but I felt that I could not trouble Dr. Barnett for more details after his somewhat plaintive statement in reply to my second letter of enquiry, that his "asylum work was merely an item of his general duties, and that he had no assistant."

The first point I shall notice is the proportion of insane to population:—

On Dec. 31, 1887, (and I may mention here

that all the statistics I have collected go to the close of 1887), the population of the Australian colonies was 2,951,590, and the number of insane 8,435. There was, therefore, 1 insane person in every 349, or 2·86 per 1,000; the proportion of insane men being 1 in 380, and that of women 1 in 377.\*

There was considerable difference in the proportion in the different colonies,† Victoria heading the list with 1 insane person in every 294, and Queensland and South Australia closing it with 1 in 419, and 1 in 431 respectively. The proportion in New Zealand was 1 in 380. The reason why lunacy is more prevalent in Victoria than in the other colonies I must leave for your discussion, merely suggesting that the returns seem to point to a somewhat over stringent registration—patients on leave of absence being retained on the books for long periods. In the case of Queensland there has been hardly time for the full accumulation of chronic cases—a process which takes some years.

How does the proportion of insane in Australia compare with that in Great Britain and Ireland? On Dec. 31, 1887, the proportion in the mother country was 1 in 342, or 2·92 per 1,000; the range being from 1 in 316 in Ireland, to 1 in 346 in England.‡ So that at present the burden of insanity in Australia is somewhat less than in the United Kingdom.†

Is insanity in Australia increasing in proportion to the general population? I must answer this question in the affirmative, and add that the increase has during the last 10 years been only a slight one, and would appear to be due to the accumulation of chronic cases, and not to any proportional increase in the rate of "occurring insanity." On Dec. 31, 1877, the proportion of insane to population was 1 in 356, or 2·80 per 1,000 as against 1 in 349, or 2·86 per 1,000 ten years later, by no means a large increase, and mainly in the younger colonies. In the older colonies there was even some decrease. In Tasmania the proportion decreased from 1 in 317 in 1877, to 1 in 399 in 1887. In New South Wales there was a slight decrease. The proportion in Victoria was practically unchanged. South and West Australia and Queensland showed an increase—greatest in the latter colony.§

The admissions in proportion to the population

\*Table I.

† Victoria 1 in 294	New Zealand 1 in 380
West Australia 1 in 361	Tasmania 1 in 399
New S. Wales, 1 in 369	Queensland, 1 in 419
	S. Australia, 1 in 431

‡Table II.

‡ One in 349 in Australia, as against 1 in 342 in Great Britain and Ireland.

§ Table I.

which show the ratio of "occurring insanity," were in 1878, 1 in 1,550, and ten years later, 1887, had dropped to 1 in 1,738. The average for the 10 years being 1 in 1,690. †

The nationality of the insane at present under care is of interest now, and will be of equal, if not of greater interest, to those who may examine our statistics some years hence. These statistics are not as exact as they might be, owing to imperfect returns from Victoria and Tasmania, in which the nationality of a considerable number is returned as "unknown"; but they show several important facts, the chief among them being that only 23·12 per cent. of the insane now under care were born in Australia, and that the larger proportion of our patients therefore are of other than Australian nationality. Upwards of 26 per cent. are from Ireland, 23 per cent. from England, 6 per cent. from Scotland, 2 per cent. from Germany, and 2 per cent. from China, whilst under the heading of "other countries and unknown" nearly 14½ per cent. are tabulated. Of these about 5 per cent. come from countries other than those already specified, and include stray specimens of nearly every race and nationality. Those tabulated as "unknown" in the Victorian and the Tasmanian statistics are evidently of foreign as opposed to Australian nationality, and by far the larger proportion should be credited to England, Scotland, and Ireland, and go to swell the already large percentages from these countries.\* \*

The proportion of patients of Australian nationality is, as might be expected, much greater in the older than in the younger colonies, and ranges from 12 per cent. in Queensland to 32 per cent. in Tasmania. No detailed census has been taken since the year 1881, and it is not possible therefore to fix accurately the relative proportion of the insane with regard to nationality, but there can be no doubt that the proportion of insanity is, throughout Australia (as it was in New South Wales in 1881), much greater among the foreign than among the native born. At that time in New South Wales the proportion of insane per 1,000, among persons of British nationality, was 8·03, and among foreigners 6·87, whilst among Australians it was only 1·22 per 1,000.

The comparatively small proportion of insanity among Australians is partly to be accounted for by the fact that fully one-third of these are children, whilst insanity is mainly a disease of middle life and old age, but there are some reasons which I have not time to detail, which lead to the pleasant conclusion that Australians are less subject to insanity than people of other races living in Australia.

Turning now to the question of the recovery and death rate of insane persons under treatment and care, it is satisfactory to find that with all the imperfections of Australian asylums, and the difficulties with regard to management which beset us, but from which the medical officers in English asylums are happily free, our recovery and death rate compare not unfavourably with those in asylums in the mother country. Taking the decennial period from 1878 to 1887 (and statistics on these points are apt to be misleading unless they include quinquennial or decennial periods), the recovery rate in Australian asylums was 42·09 per cent., whilst in addition 6·97 per cent. were discharged as relieved, as compared with a recovery rate of 40·04 per cent. in English asylums for the corresponding ten years. The recovery rate in Scotch and Irish asylums averaged a little below 40 per cent. for the same period.

It should be noted, however, that whilst the statistics of Australian asylums include idiots—a very incurable class—these are eliminated from the English statistics, and the Australian returns are therefore even better than they would at first sight appear.

The death rate in Australian asylums for the decennial period above mentioned was 7·09 per cent., whilst in England it was 9·58 and in Scotland 8·50. The death rate in the various colonies was as follows:—Queensland, 5·82; New South Wales, 6·72; Victoria, 7·11; Tasmania, 8·00; and South Australia, 9·00. The New Zealand death rate was 5·94.\* The returns from Western Australia are incomplete.

The small death rate in the young colonies of Queensland and New Zealand is interesting in connection with the rapid increase of insanity in these colonies, and the difference between the Australian and English rate goes far to account for the somewhat rapid growth of insanity in all the Australian colonies as compared with the mother country up to very recent years. The warmth and equability of our climate, which render our patients much less liable to pneumonia and other chest affections than the insane in Great Britain, have, I think, more to do with the low death rate than any other causes, and it is interesting to observe that, with one exception, the warmer and more equable the climate the lower the asylum mortality.

With regard to the classification of the insane, it appears that of the total number 9·85 per cent. are suffering from undeveloped intellect, are in fact imbecile or idiotic; 8·07 per cent. are under criminal disability; nearly 1 per cent. are still at the charge of the Imperial Treasury—the relics of a bye-gone regime—and 86·59 per cent. belong to

† Table III.

\*\* Table IV.

\* Table V.



the ordinary class of the insane who have possessed intellect and lost it, and who are under no criminal ban.† Only 1·188 of the total number of 8,435, or 14·08 per cent are deemed curable; so that the large mass of our asylum population consists of chronic and incurable patients.‡ The differences in the proportion of the various classes in the different colonies as shown in Table VI. are interesting, but I have not time to discuss them or their probable causes.

I should have been glad to discuss the question, "Does insanity, as seen in Australia, differ in its forms and types from insanity in other countries?" But on this point must content myself with placing before you one or two facts relative to general paralysis, a most interesting and typical form of insanity, which has only been fully known and recognised in modern times, and which is undoubtedly increasing in frequency.

This peculiar affection is at present much less common in Australia than in England. The proportion of general paralytics admitted to Australian asylums in 1887 was 1·8 per cent. of the total number admitted, whereas the proportion admitted into English asylums for the same year was 8·6 per cent.§

Again the proportion of general paralytics admitted to the New South Wales asylums for the quinquennial period 1883 to 1887 was 3·4 per cent., whilst the proportion admitted to English asylums for the same period was 8·4 per cent.‡ This disease already appears more common in the older than in the younger colonies, and it will be interesting to observe if it increases in all.

I may note in passing that as yet epilepsy is decidedly less common in Australian than in English asylums.§

Time will not permit of any lengthened notice of the lunacy laws of the Australian Colonies, but this is a subject which I cannot pass over altogether in silence.

Each colony has its own Lunacy Acts, passed at various dates, commencing with that for Tasmania in 1858, and ending with that for Queensland in 1884. The foundation of all of them is English law and precedent. The superstructure varies with colonial needs and expediency. The scattered population, the paucity of qualified medical practitioners, the enormous distances, and various other matters have had to be taken into account, and legislation adapted thereto.

In all the colonies (except in the case of indigent patients committed by Justices in Tasmania and South Australia, where one medical certificate is accepted) two medical certificates are required before patients can be admitted to hospital. In all patients can be admitted at the "request" of

relatives or friends if such request is accompanied by two medical certificates. In all there are stringent provisions that the persons signing the "order," "request," and certificates shall be independent and unassociated persons. In all there are provisions for the rejection of imperfect certificates; and in all, except Tasmania and South Australia where there are special arrangements, the medical officer of the hospital must give a separate and independent certificate of insanity within a brief period after admission or the patient cannot be detained. There are also in all abundant provisions for inspection by inspectors, commissioners, official visitors, or other authorized officials, and the interests of the patients are as fully guarded with regard to discharge as to admission.

On the whole the lunacy laws of the Australian colonies appear to be satisfactory, sufficient, and well abreast of the time. They are in no way behind, and in some respects ahead of the legislation in Great Britain, the United States, Canada, and the principal European countries. In the provision of reception houses in New South Wales and Queensland, and of lunacy wards in public hospitals in Victoria, for the treatment of insanity in its early stages, the Statutes are decidedly in advance of those of Great Britain.

During the year 1887 the Master in Lunacy in New South Wales applied to the English Courts for the payment to him of money belonging to a patient in one of the hospitals of the colony, and in delivering judgment\* Lord Justice Cotton thus expressed himself: "We have been referred to the Lunacy Act of New South Wales, and undoubtedly that Act contains provisions which make it practically impossible that any one should be in an asylum without sufficient reason." Whilst Lord Justice Bowen said: "I desire most emphatically to add my voice to what has been said by the Lord Justice as to the provisions of the Colonial Legislature being above all comment and criticism as regards these insane patients. We have the most ample confidence not only in the legislation, but in the officers who administer the law, and the patient is surrounded by all the protection and safeguards that could reasonably be invented for the purpose of taking care of herself and her property."

What is here said of the lunacy laws of New South Wales might, I believe, be said with but little reservation of the lunacy laws of all the Australian colonies. The newer Acts are, as they should be—the better. Our younger sister, Queensland, has been able to see the few weak points in the legislation of the older colonies, and avoid them.

† Table VI.

§ Table VII.

‡ Table VIII.

\* Law Report, Chancery Div., Part 12, 1887.

Whilst I am on this subject I may mention that during the last three or four years there has been in England an outcry for the reform of the Lunacy Acts, and so-called reformers have advocated three radical changes:—

1st. That no patient shall be sent to an hospital or licensed house unless examined and committed thereto by a Judge or Magistrate.

2nd. That all such committals shall be for a definite time—say one or two years, and shall be renewed if necessary.

3rd. That all medical certificates shall be signed by specially appointed medical practitioners or experts.

I think there is reason for the strongest objections to each and all of these proposals. It is clear that they would widen the breach between the care and treatment of diseases of the brain and diseases of other organs which for years all the teaching, all the endeavours, and all the wisdom of modern science has been endeavouring to close and annul, and did time permit I should, I think, be able to show that such legislation would be a retrograde step, and be able to give good and sufficient reasons for its rejection.

As yet there is no special legislative provision for idiots and imbeciles in any of the Australian colonies, and the English "Idiot Act of 1886" entitled "An Act for giving facilities for the care, education, and training of idiots and imbeciles" might with advantage be adopted.

In Great Britain there are various methods of providing for the insane. Besides State institutions for criminals and for the insane of the military and naval services, there are county, district, and parochial asylums, as well as lunatic wards in poor houses, under the management and control of local authorities, and the inspection of Government Officials; lunatic hospitals under trustees, in which the excess payments of the well-to-do are used for the support of those less favoured of fortune; private asylums which receive patients at rates suited to almost all classes of paying patients; a system of payment to relatives towards the support of the insane poor; and in Scotland and other places "boarding-out" with strangers who have no connection with, or interest in the patients except the monetary one.

In Australia, with the exception of private asylums in New South Wales and New Zealand, the whole of the institutions for the insane are under State control, supported by funds provided by Parliamentary vote, and managed directly by the Government, and there is no established system of payment to relatives or "boarding-out."

In Great Britain, with an elaborate system of local government the result of long experience, the local or district provision for the insane leaves little

or nothing to be desired. In America (where local government is less completely organised), whilst the State asylums are admirable, the institutions under local or municipal control are for the most part dismal failures. The fifth report of the State Committee on lunacy of the Commonwealth of Pennsylvania, published only a year or so ago, contains the following statement: "The entire arrangement and government of many of the county institutions are such that the insane poor cannot be otherwise than neglected and cruelly wronged, and the treatment of this unfortunate class in poorhouses has been simply that of continued neglect." The details given in this and other reports, from Pennsylvania, New York, and other States, are simply horrible.

I see nothing in the present state of local government in Australia which leads me to think that municipal or county authorities would be any better guardians for the insane than they are in America, and I think our insane fortunate that they are, so far, wards of the State. It would be well, however, if our State institutions were supplemented by others, like the lunatic hospitals at home, managed by trustees for the good and profit of the patients only, and bearing the same relation to the sick in mind as our general hospitals do to the sick in body.

As yet private benevolence has not stepped in to assist in the maintenance and care of the insane in Australia. We have no institutions like the Maclean Hospital in Massachusetts; the Pennsylvania Hospital for the Insane at Philadelphia; the Hospital at Coton Hill, near Stafford; Barnwood House, near Gloucester; the Friends' Retreat at York; St. Andrew's Hospital, Northampton; the Holloway Sanatorium at Virginia Water; Murray's Asylum at Perth; the Crichton Institution at Dumfries; or the several Royal Asylums at Edinburgh, Montrose, and Glasgow, and other cities. I mention these as types of many others in Great Britain and America, all of them magnificent institutions, built or endowed by private beneficence, for the care of patients who are not able to meet the charges for maintenance. In the small New England State of New Hampshire, upwards of £54,000 has been bequeathed for the benefit of the patients in the State asylums—and the interest is now expended by the trustees for their benefit. This is by no means an exceptional instance in America, whilst, so far as I am aware, not one penny of private means from subscriptions, donations, or legacies, is available for the maintenance of insane persons in this great continent.

I trust that such an opprobrium will not long continue, and that, ere long, the sick in mind

may share with the sick in body in the contributions of the benevolent. I know no way in which the surplus wealth of the rich can be better expended. I know no way in which more real solace and comfort can be afforded, and a truer charity exercised, than in placing in a position of comfort the minister of religion, the physician, the artist, or the teacher, who would, except for such aid and assistance—owing to the loss of all means through a cruel malady—be left to the charity of the State, and have to herd with the vagrant and the pauper, though still refined—still cultured—still with the instincts of a gentleman.

Again, though I am no advocate for private asylums, I think these institutions—for the richer classes—have a useful place in an asylum system, and can make provision for those who cannot be so adequately cared for under the, perhaps, necessary restrictions as to outlay in Government institutions.

Until within the last few years all the hospitals for the insane in Australia received all classes, and were in no way specialised, but with the growth of population the wisdom, nay, the necessity, of providing separate accommodation for criminals, for idiots, and imbeciles, and for the large class of chronic insane has been recognised.

New South Wales, Victoria, and Tasmania have already, practically, distinct institutions for criminals. In New South Wales there is a separate hospital for idiots. In Victoria and Tasmania these classes are placed in cottages—separate from, though in connection with, the hospitals—and the Victorian Government, to its great honour, has lately made a distinct step in advance, and commenced a system of special education and training, after English and American models, for this feeble-minded class.

The much-debated subject of the separation of the acute and chronic insane by placing them in different institutions, has found a practical settlement. At Parramatta in New South Wales, Sunbury in Victoria, and Ipswich in Queensland, buildings erected for other purposes, and unsuited for the more demonstrative classes of the insane, have been set apart for chronic cases, and there can be little doubt but that this arrangement will be more fully carried out in the future, as tending to economy and more systematic classification.

The system under which all patients who are brought to our hospitals in all the Australian colonies are admitted, whether there is room or not, is one that, so far as I am aware, obtains in no other country—certainly in no other English-speaking community. In Great Britain, in the United States, in Canada, a standard of accommodation is fixed, and no patient is admitted in excess of this. In Great Britain the numbers in

excess of the accommodation in local asylums are accommodated temporarily in the asylums of other districts, in licensed houses or poorhouses. In Canada and the United States the temporary accommodation provided is in poorhouses, or other receptacles, and the patients must await their turn for admission, should the State asylums be full. Our system has one advantage: it gives us our patients in an early, and in many cases, curable stage of their malady; but it has disadvantages which outweigh this. It does not allow us to do our best for them when we have got them. Our accommodation (I speak from twenty years' experience) is seldom or never in advance of our needs. It is often grievously behind them; and the overcrowding consequent on this is subversive of all order, cramps, if it does not paralyse, the best efforts of our medical officers, and is too often fatal to the mental health of our patients.

If this system of admission is to be continued, it should be in connection with one for providing more speedily, and under less restrictions than at present, ample and suitable accommodation—and this, gentlemen, I fear, will never be until the management of our asylums is placed in the hands of persons (a Commission it might be—these are the days of Commissions) who will have more weight, and be more listened to by the Government than any single head of a department—even if an embodied importunity—can hope to be. I think I have not been remiss in urging the claims of the insane in New South Wales, but the accommodation in that colony is still far short of what is necessary to give 600 cubic feet per patient—the least space necessary for health, quiet, and efficient administration; and I gather that the same condition of things exists in other colonies.

Some of the buildings in use for housing the insane in Australia are strangely different to what they should be, and require improving off the face of the continent. There are some in Tasmania, in Victoria, and in New South Wales which are heart-breaking to those having charge of them, but it is to be hoped that these will soon be things of the past, and the fine piles at Kew in Victoria, at Parkside in South Australia, at Callan Park in New South Wales, at Toowoomba in Queensland, and at Seacliffe near Dunedin in New Zealand, are evidences of a large and wise liberality, and an earnest of advancing civilization.

The number of medical officers to patients in Australian asylums is at present far below what it should be. In the United States it is 1 to every 160; in Ontario, the foremost State of the Dominion of Canada, 1 to 209; in Great Britain and Ireland, 1 to 250; in Australia, 1 to 825.

I understand that arrangements have been made in South Australia to commence this year with one additional medical officer, and the New South Wales Parliament has provided means for the employment of 2 in addition to the present medical staff.

Under disadvantages, some of which I have indicated, we may, I think, be proud that non-restraint in the treatment of our patients is our rule—restraint the occasional exception. From the returns furnished to me from all the Australian and New Zealand asylums it appears that restraint is on an average used only in 1 out of 300 or 400 cases, and then chiefly for surgical reasons or to guard against suicide.

Thus much as to our present position. And now turning from the present to the future, what are to be our further onward steps in the care and treatment of the insane and in the advancement of Psychological Medicine? To the amateur alienist—at all events in Victoria—the great desideratum would seem to be the replacing of what are somewhat unfairly called barrack buildings by cottages, and if one is to trust newspaper reports, the Government of Victoria is about to take the astounding step of housing some 1,500 insane patients in cottages, and placing this “City of the Simple” at some distance from the metropolis.

The objections to this scheme have been so ably set forth by Dr. Barker, an officer of the Victorian Lunacy Department, that it is perhaps not necessary for me to go fully into the subject. Something, however, I must say on this point.

Whilst I am very decidedly of opinion that cottages should form a part of every Hospital for the Insane, I am also of opinion that they cannot be very largely used, and that for  $\frac{1}{4}$ , if not  $\frac{1}{5}$ , of the insane under hospital care, cottages will be found altogether unsuitable. They are costly to build, costly to work, difficult to administer and supervise, and add little or nothing to the comfort and well-being of the patients placed in them. The truth is that the large majority of patients when fit for cottages are fit for discharge. For convalescents, for certain of the chronic insane—especially the steady workers who do so much to carry on the farm and garden operations of all hospitals—cottages afford a comfortable and suitable home. For the sick they are unsuitable as withdrawing them too much from efficient medical supervision; for a great majority of acute cases, for the excited, dangerous, and turbulent they are unsafe; and for the chronic demented, the dirty, the paralytic—who make up so large a part of all asylum population—they involve too much expense, and too extended a supervision, without any commensurate result. Let us have cottages as part of our hospitals by all means. So far as

the hospitals under my supervision are concerned I could wish for a decidedly larger proportion of this class of accommodation, but I do not anticipate any great amelioration of the condition of the insane by this means, and if the official programme is to be carried out in Victoria I fear it will be a costly mistake. The truth is that no one form of building can meet all the needs and requirements of the insane. Cottages alone will be as unsuitable as “barracks” alone. What is required is variety in the construction, arrangement and position of the buildings of an asylum; so as to allow of judicious segregation, and to provide for the wants of patients of different classes. If I am to indicate briefly what I consider the best form of asylum; what it is desirable that the Psychopathic Hospital of the future should consist of, I should stipulate for a central hospital for the sick and for acute cases, surrounded by pavilions or blocks of varying form and construction for different classes, and supplemented by cottages for the convalescent, the quiet, and for certain chronic cases. The buildings should stand on a large estate and be spread over a considerable area. They should contain abundant space, with light, airy, cheerful day rooms, large verandahs, and well-ventilated dormitories. It is essential that  $\frac{1}{4}$  at least of the total accommodation should be in the form of separate or single rooms. It is important—at all events in our climate—that the day rooms should all be on the ground floor, so as to afford direct and easy access to the verandahs and the open air. It is even more important that the blocks or divisions should be comparatively small, so as to prevent too large an aggregation of patients, and sufficiently numerous so as to allow of a varied classification. These are our main requirements, and I would point to the Eastern Hospital for the Insane at Kankakee, Illinois, as perhaps the best existing model. Special architectural forms or styles are but of secondary importance, but I would plead for space as against outside ornamentation, which is too often only a mockery of the misery within.

The boarding out of pauper children has been so unqualified a success that it has been assumed that the boarding-out of pauper lunatics is likely also to have good results. The lunatic colony at Gheel, the boarding-out at Kennoway and other places in Scotland, are each in their way interesting and encouraging experiments. The system, as tried to a very limited extent around the Sussex County Asylum and at other places in England has not been without good results, and it must not be forgotten that there are in England upwards of 6,000 out-door pauper lunatics, or upwards of 7 per cent of the total number of the insane, mostly living with relatives, and receiving

weekly relief from the guardians out of the poor rates; but that it will ever be in Australia a method of providing for any large number of the insane, I very much doubt. I do not propose to discuss the question at length, as it is the subject of separate notice in a paper by Dr. Beattie Smith, but I would point out that with children there is increasing growth, increasing usefulness, increasing intelligence, to appeal to the feelings of their foster parent, whilst with the lunatic there is none of these things, and the conditions are altogether different.

To subsidise, assist and encourage the friends of the chronic insane to keep them at home, or to remove them from hospitals when fit for such removal should, I believe, be part and parcel of our asylum system, and in time I believe a very considerable number will be kept in their homes by means of State, parochial, or municipal aid, but whilst wages are high and there is much scope for active employment, the number will not be large.

The antecedent conditions which have rendered Gheel and Kennoway possible—a large waste of poor land, and a miserably poor proprietary who are glad of the added pittance to eke out their want of means—are things which none of us can wish to see in Australia. The well-to-do condition of our working classes renders the boarding-out of the insane (by which I mean paying strangers to receive and take care of them in their homes), at present at all events impracticable, even if it were desirable, whilst the absence of village life, the isolated dwellings, the sparse population, the special dangers and difficulties of "bush" life, and the impossibility of effective medical or parochial supervision, all stand in the way of an adoption of the system, except in very special and occasional cases.

The separation of the idiotic and imbecile from the insane, both by legislative enactment, as I have already indicated, and by the provision of special institutions in which they can be trained and taught is a matter of very considerable importance, and will, I have no doubt, be undertaken in all the colonies as soon as the number of these patients in each justifies the expense necessary for the special provision. The memorandum of the Committee of the Charity Organisation Society, agreed to at meetings held in London in 1877, has been virtually adopted by all who have thought on and worked at this subject.

In a few more years, when the number of the criminal insane has increased, the wisdom of making provision for this class in separate buildings, if not in separate establishments, will, I have no doubt, be acknowledged and acted on in all the Australian Colonies, as it has been in England, Scotland, Ireland, in the state of New

York, and in New South Wales, and provisionally in Victoria and Tasmania. The further question arises whether such provision should be in connection with the Lunacy or the Penal Department. Those patients who are acquitted on the ground of insanity, who are insane first, and whilst insane and irresponsible commit criminal acts, may fairly and properly be placed in wards or establishments in connection with the Lunacy Department; but so far as I can understand there are no valid reasons why arrangements should not be made for the treatment of those who become insane whilst undergoing sentence—who are criminal first and insane afterwards—in connection with the Penal Department. When prisoners undergoing sentence suffer from bodily ailment they are treated in properly provided hospitals in the prisons. Why should not provision be made in prisons also for those suffering from mental ailments and brain diseases? Suitable buildings should not be difficult to provide. The prison surgeon should be as well qualified to treat diseases of the brain as of other organs, and the gaol warder has special qualifications for dealing with this special class. The transfer and re-transfer of these patients from the Penal to the Lunacy Department is a constant difficulty and trouble, the system leads to malingering and to numerous other difficulties in both departments, and it tends to make our asylums into prisons. The practical wisdom of the Scotch has solved the question by establishing wards for criminal lunatics in connection, not with an asylum, but with the general prison at Perth, and an interesting experiment at Woking Prison in England, where all the insane convicts have been kept during the last 11 years, has been reported on at length by Dr. Gover in an appendix to the report of the Director of Convict Prisons for 1885-86, and has proved a substantial and gratifying success.

The most desirable and necessary onward step, as it appears to me is a more extended, larger, and more accurate scientific study of insanity. More extended with regard to the medical profession at large. Larger, more accurate and scientific, so far as those specially engaged in asylum work are concerned. I think I am not overstating the question when I say that not half of the medical practitioners in Australia—aye and in Great Britain also for that matter—have ever attended a lecture on, or made any study of, mental diseases. In the great Medical School forming part of the University of Edinburgh, although there is a lecturer on insanity—in every way a master in his speciality—attendance on his lectures is not compulsory, and he is not permitted to set a single question in the examination papers for the degrees granted by the

University. Most of the London medical schools have lecturers, but attendance, as at Edinburgh, is voluntary, and the licensing bodies make psychological medicine no part of their examination. It is quite natural that with so many things a student must know, he holds in light esteem those things about which he may or may not trouble himself at his discretion, and the study of mental phenomena occupies the attention, therefore, of only a few of the more thoughtful students. At some medical schools no provision is made for teaching the subject, and the result is that the overwhelming majority of medical practitioners can, and do, obtain their diplomas to practise without having attended a lecture or answered a question on the subject of mental diseases, seen the inside of a lunatic asylum, or examined a person of unsound mind, except in connection with some physical ailment, as in the delirium of fevers. It is only a necessary consequence of this that abnormal mental processes in their beginnings, slight deviations from mental health—insanity in its most remediable stage—are too often unrecognised and untreated, and when recognised too often regarded as disorders of the intellect rather than diseases of the brain, and held to be beyond the ordinary resources of mental science. It is a consequence also that the medical profession as a body takes but little interest in insanity, and that medical practitioners as a rule consider their duty with regard to it to consist in the somewhat perfunctory signature of medical certificates. But more important than all, a host of neurotic individuals become insane, who under proper care need never pass the boundary line, and numerous individuals who under proper advice might keep sane, break the laws of mental health with disastrous results to themselves and their offspring. The young Universities of Sydney and Adelaide have very wisely insisted that the study of psychological medicine shall form a compulsory part of the curriculum for their degrees, and that all candidates shall be examined in this subject. The University of Melbourne has, as yet, taken no steps in this direction, but I cannot believe that its medical graduates will much longer be untaught and unexamined in this important branch of scientific medicine. In this connection, and for other reasons which I cannot now enter on, I regard the proposal to remove both the hospitals for the insane from the neighbourhood of Melbourne, and therefore from the neighbourhood of the University, as wanting in wisdom and forethought. The Metropolitan Hospital for the Insane should be in a manner affiliated to the University, and should be a school of practical teaching, and believe me such teaching will be fraught with the highest good not only to the

students but to the medical officers of the hospital; will give them a renewed interest in their work, and will lead to a more accurate and systematised knowledge of their subject. I believe that the time is not far distant when all the medical officers of our hospitals for the insane will be engaged in clinical teaching and demonstration, and when arrangements will be made for the assistant-medical officer's appointments to be held for limited periods by our newly-fledged graduates. There is yet another step—and one I have for some years held in hopeful view—to complete a system of alienistic medical training, so as to procure an adequate supply of competent and efficient candidates for the various positions in our asylums and other medical offices in the public service, as well as to advance practical psychiatry and to diffuse a better knowledge of insanity throughout the profession of medicine, and this is the establishment in connection with our chief hospitals for the insane of a system of clinical clerk or assistantships. These positions corresponding to those of "internes" in continental hospitals, should have a tenure of from six to twelve months, and carry with them residence with adequate provision for board and attendance. Such a system is in force in several of the hospitals for the insane in the United Kingdom, notably at Bethlem, the West Riding, and at Edinburgh. It has been tried with great promise of public utility under the administration of Dr. Workman in Ontario, and the Minister for Public Instruction in Italy, to his honour, and to that of the Italian Government, some time ago initiated a complete and liberal scheme of this kind in connection with the University of Modena, under the direction of Professor Tamburini, the Medical Director of the asylum of Reggio Emilia.

In advocating a larger, more accurate and scientific study of insanity by all specially engaged in asylum work, I am bound to point out, that we have hitherto, at all events till lately, worked too much within the trammels of a somewhat narrow specialism. We have regarded insanity as standing apart from other diseases, we have gravitated so to speak round psychology, and it is only of comparatively late years that we have recognized that diseases of the cerebrum are only a part of the great subject of diseases of the nervous system. The very name of this section of our congress is in a measure evidence of this, and I would suggest that at our future meetings a Psychological and Neurological section would be a more fitting appellation in relation to the ground which we desire to cover. By the study of general paralysis, which is a disease not only of the brain, but of the whole nervous system, by the ascending course of some diseases of the spinal cord by which

ataxic and paraplegic subjects become demented, by examples of general sclerosis of the nervous tissue and other affections, we are being shown the intimate correlation of disease; and the study of cause and effect is demonstrating to us that if a large part of our insanity is not absolutely caused by diseases of other organs, there is no single part of the economy, lesions of which may not bring about psychical disorder in predisposed subjects. We are beginning to understand, but as yet we are far from an accurate and scientific knowledge of what may be called the alternations of neuroses, that though neurotic manifestations may be different in the individual, and interchangeable by inheritance from generation to generation, they are practically of one family and essence. In truth, as has been well said by a recent writer, "We have crossed the threshold of the great temple of mind, but we know little of the inner sanctuaries." This knowledge can only come by adding to our empirical work and observations a scientific comparative study of the homologies of disease.

That the study of insanity has heretofore not been as scientific and accurate as is desirable is not the fault of the medical officers of hospitals for insane in Australia. They are overweighted and overburdened with other work, and until their number is increased in proportion to the patients under their charge, they cannot undertake the pathological, the microscopical, and the scientific therapeutical work which should be steadily progressing in every hospital.

I believe that the large majority of those engaged in the care and treatment of the insane are duly impressed with the advantage, nay the necessity of systematic and varied amusements as an aid in curative treatment, and the increasing percentage of patients actively and usefully employed in our asylums shows that the value of employment towards the same end is duly appreciated.

The importance of a generous dietary, indeed of a wise liberality in the matter of food is fully recognized, and not a few of us are disciples of the "gospel of fatness," so ably and eloquently preached by Dr. Clouston, but I believe there are some curative agents which are neither as fully nor as wisely employed as they should be, and which it behoves us to use with greater accuracy, greater care, and greater method. And first as to drugs—Medical men, and those practising our speciality in common with the rest of the profession, have become only too often sceptics in medicine as well as in religion, and to quote a distinguished American alienist, they "give their physic as they say their prayers—without expecting any immediate or any literal answer." Now I would deprecate this mental attitude, and urge a more liberal, and

more accurate, and in some cases, a more continuous employment of drugs. Considering the immense importance of sleep, do we study sufficiently the old vegetable neurotics and their alkaloids, and the newer chemical compounds, in regard to their action and their dosage with the view of producing sound, and yet harmless sleep? Do we not fail in many of the cases in which we do employ sedatives because we measure out inadequate quantities to calm the excitement of mania, or the distress of melancholia? Considering the marked trophic changes in many forms of insanity, do we employ the alteratives such as arsenic and the milder mercurials, the alkaline salts, and the nervine and vasi-motorics and stimulants, with sufficient discrimination and for sufficient periods of time? Considering the marked dryness of hair and skin and the malodorous character of the cutaneous secretions, is our knowledge or our practice of hydrotherapeutics either creditable or satisfactory? Is the Turkish bath employed either as frequently or as fully as it might and should be, and is our use of simple or medicated baths carried out even to the full scope of the means at our command? The physical inaction of a number of the insane, especially in some of the forms of mental stupor and dementia, points to massage as a curative agent as yet too little used and understood in our speciality. The obvious relation of electricity to nervous force and the extreme sensitiveness of our patients to electrical change as evidenced by increased excitement and noise, and by more frequent and severe epileptic fits during times of electrical and atmospheric disturbances, are well known. The influence of electricity on some of the more obscure nutritive changes is recognized, and the treatment of some forms of insanity by the continuous current has been more than favourably reported of. But has galvanism been with us thus far, except in a few instances, much more than a scientific toy?

There is surely much for us to do in this, and in other directions I have indicated, towards the scientific treatment of insanity. Among other things, our hospitals should be great fields for brain surgery, the brilliant results attending which are of the highest interest and importance. Another direction in which I anticipate progress is the systematic training of attendants and nurses for their special duties. This training should include a knowledge of general as well as special nursing, and to this end the general hospitals should render us assistance by receiving for definite periods our attendants and nurses for training on their staff. So far the system is as yet in its infancy in these colonies, but Dr. Sinclair and Dr. Ross, who have been working for two

years at Gladesville, are more than gratified with the result, which to my mind is most satisfactory. The effort to improve the qualification of those in immediate attendance and care of patients promises great benefit to the insane, and I am making no rash prediction in saying that within another decade no attendants or nurses will be employed in State Hospitals for the Insane in these colonies, except as probationers, who have not gone through a systematic course of training and instruction in their duties, and received certificates of their fitness for their special work.

Did time permit, I might go on to indicate some of the hindrances, the troubles, and difficulties which are known only to those who are engaged in lunacy work, but I should serve no practical purpose. Insanity, though a most interesting, will always be an unpopular subject, and one in which little or no outside interest will come to our aid. Most of the progress which I have indicated must come from within rather than from without, and though I believe that the care and treatment of the insane, and our knowledge of insanity, will steadily improve, and a more intelligent interest arise in our work, especially among the members of the medical profession, we shall in the future, as in the past in only too many cases, and for some years to come, have to do perforce of circumstances what is expedient or possible, instead of what is right and best, and to be content, or as content as we can, with an attainable good instead of an unattainable better.

## REPORTS OF SOCIETIES.

### MEDICAL SOCIETY OF QUEENSLAND.

GENERAL meeting held on Nov. 13th, at 8.30 p.m., in the School of Arts, Brisbane. Present—Drs. Little, W. S. Byrne, Forbes, Thomson, Gibson, Tilston, Hill, and Love.

A number of new pharmaceutical preparations, sent by Messrs. Elliott Bros., were exhibited.

A ballot for the following candidates was taken, and P. Bancroft, M.B., Sydney, and J. Booth, L.R.C.S.E., L.R.C.P.E., were elected. Dr. Tilston proposed and Dr. Thomson seconded for membership Dr. Vereker Bindon (George-st.); Dr. Tilston proposed and Dr. W. S. Byrne seconded Dr. Comyn (Red Hill).

Minutes of last meeting read and confirmed.

DR. HILL introduced the question of establishing a central place of registration for trained nurses. The idea met with general approval, and it was finally agreed to submit the subject to the annual meeting, the members to be apprised of the proposal on their notice cards.

DR. LOVE read a paper on Pneumonia of the Apex. Drs. Gibson, Thomson, and Little joined in the discussion.

#### ANNUAL MEETING.

The second annual meeting of the Society was held on Dec. 11th, at 8.30 p.m., in the School of Arts, Brisbane. Present—Drs. Little, (in the chair), Thomson,

Gibson, Hogg, Connolly, Bancroft, Clowes, W. S. Byrne, and Love. Dr. Thorpe of H.M.S. Paluma, was present as visitor.

DR. HOGG showed specimens of duodenum and jejunum of patient who had apparently suffered from Bright's disease, but in whom, after death, large numbers of the worm ancylostomum duodenale were found. He regarded the presence of the worms as the cause of the symptoms, the kidneys being structurally healthy.

DR. HOGG also showed a large bottle full of stones, keys, penknives, sticks, which had been passed by the same patient.

A ballot was taken and Dr. Vereker Bindon, (George-street), was elected a member.

DR. LITTLE proposed and DR. CLOWES seconded for membership, Dr. Edgelow, of Lutwyche.

The motion regarding the registration of nurses was postponed, by general consent, till the next meeting.

DR. LOVE proposed that the joint offices of Hon. Secretary and Treasurer be divided, as he found the Secretary's work quite enough to manage without the extra expenditure of time and trouble demanded by the financial affairs of the Society.

DR. LITTLE seconded the motion, and thought that the Librarian—whose post was at present a sinecure—should be called upon to take over the duties of Treasurer as well. Carried unanimously.

The office-bearers for the past year retired, and a ballot was taken for their successors with the following result:—President: John Thomson, M.B.; Vice-President: W. S. Byrne, M.B.; Secretary: Wilton Love, M.B.; Treasurer and Librarian: Edward Tilston, L.K.Q.C.P.I., L.R.C.S.I.; Council: Joseph Little, M.B., James Hill, M.D., J. Lockhart Gibson, M.D.; Auditors: David Hardie, M.D., J. S. Clowes, M.R.C.S.

A vote of thanks was carried to the retiring president, secretary, and other office-bearers.

The Hon. Secretary (Dr. Wilton Love) then read his report for 1888, as follows:

Mr. President and Gentlemen,—It is with feelings of pleasure and satisfaction that I am able to present to you, to-night, the second annual report of the Medical Society of Queensland. Already the Society has passed the infancy of its existence, and has not succumbed to the perils of teething, and of early life, as its two unfortunate predecessors did, and already there are not wanting the signs which forecast a useful and robust manhood. The Society has now taken a recognized place in the thoughts and regard of the medical profession in and near Brisbane. The monthly meetings are usually looked forward to, and pleasant and instructive hours have been spent. The two former Societies lived but nine and thirteen months respectively. The present one has now been at work for 27 months, and as statistics will presently show, its roll of members is greater than it has yet been, while the yearly balance is nearly three times as great as it was last year. As the population of this colony, in general, and of this city, in particular, continues to increase, we may expect reinforcements to our numbers year by year, and as the nature of the work of the Society becomes more widely known, we may hope for more support from medical men in the country towns. So much for eulogy. There is little to be said on the other side, save, that I would impress upon some members, that their duty does not begin and end with the payment of their subscriptions, but that each should remember that he is expected to take his share of work. If this were more definitely understood the secretary would never be at a loss where



to look for papers to be read at the various meetings, and the heat and burden of the day would not fall upon the shoulders of a few, as it has done in the past. If the names of members willing to read papers were taken at the beginning of a session, and a special date were assigned by ballot or by agreement to each, we should have a more equitable distribution of labour, and papers would not need to be prepared hurriedly, at a few days' notice—as has sometimes been the case. I throw this out as a suggestion that is worth consideration; and, when it is remembered, that the author is not expected to write a monograph, but only a paper which will take twenty minutes or half an hour to read it will be seen that the demand is not an excessive one.

Our membership, at date, is forty-six—the name of one candidate has been submitted to you to-night for approval, and in addition, one more candidate for admission has been nominated. Six new members have been elected during the year. Since last December, eleven general meetings, eleven meetings of council, and one special general meeting have been held. One general meeting lapsed owing to wet weather, and one council meeting owing to the absence of several members of the council from town. The special meeting was called, on Sept. 14th, at the instance of Dr. Taylor, to consider "The Sale and Use of Poisons Bill," then before Parliament.

Thirteen papers have been read on the following subjects, viz.:—Ovariectomy, Dr. Owens; On Emmett's Operation, Dr. W. S. Byrne; Ovariectomies, Notes of, Dr. Owens; Rhinoliths, Dr. Thomson; Case of Ovariectomy, Dr. Taylor; Case of Ovariectomy, Dr. W. S. Byrne; Sarcoma of Thyroid, Dr. Thomson; Suprapubic Lithotomy, Dr. Hardie; On Stone in Children, with special reference to Litholapaxy, Dr. Love; Laparotomy for Fibroid, Dr. Little; Tricocephalus Dispar in Relation to Dysentery, Dr. Hogg; Cases of Trephining, Dr. Little; and Pneumonia of Apex, Dr. Love.

Another paper, by Dr. Dunlop, of Ipswich, on a case of typhoid perforation, with abscess formation, was received, but postponed, owing to press of business, and then finally held over at the wish of the author. Numerous interesting cases and specimens have from time to time been exhibited before the meetings, and, through the courtesy of Messrs. Elliott Bros., we have had the opportunity of inspecting some new instruments and pharmaceutical preparations. The average attendance at general meetings has been 12, and at council meetings, 45.

On the 30th October the second annual dinner was held in the rooms of the Johnsonian Club. Twenty gentlemen, exclusive of two visitors, sat down to dinner, and a very enjoyable evening was spent. Press representatives were excluded on this occasion, owing to some unpleasantness having occurred last year with certain members of the Johnsonian Club, consequent on the publication of the proceedings in the daily press.

The transactions of the Society have appeared from time to time in the numbers of the *AUSTRALASIAN MEDICAL GAZETTE*, which being the official organ of the society, has been ordered by a number of members—the publisher generously allowing the Society 10 per cent. discount. This arrangement has worked well, and I would strongly advise all members, especially those who from some cause or other are not regular attendants at our meetings, to support this journal, as it thereby gives them the opportunity of keeping themselves informed of the proceedings, although unable to be present.

Now, for a few words in reference to finances, and I will not detain you much longer.

We closed last year with a credit balance of £12 3s. in the Union Bank, and £10 12s. 3d. in the Savings Bank—the latter being money handed over from the 1883 Society, for the express purpose of forming the nucleus for a library.

This year our credit balance at the Union Bank is £31 2s., and at the Savings Bank, £12. A total of £43 4s. Total receipts for the year, £75 13s. 6d. Expenditure, £44 11s. 6d.

I have not yet received the subscriptions of three members for the year, and one member has not yet paid his subscription to the *AUSTRALASIAN MEDICAL GAZETTE*. When these are in we shall have a total balance of over £47.

DR. OWENS and DR. CLOWES have kindly given their services as auditors.

As it is not one of our objects to accumulate funds, the Society will have to consider some method of usefully disposing of their surplus, and there are two obvious channels through which this may be accomplished. Our meetings for the past year have been held in this room of the School of Arts, and as it has been found too small and too hot, we may advantageously seek for a central place of meeting, in which more accommodation is available. This may entail extra expense again. The library fund has not been made use of during the year, and I would suggest that the committee be empowered to subscribe to the *Lancet*, *British Medical Journal*, and *The Sydenham Society*, and to put themselves into communication with some leading firm of booksellers to secure such new works as may be approved of. A press can easily be provided and the papers and books be deposited in it, the key to be left with the caretaker of the place of meeting, and to be available to any member who wishes to make use of such a convenience, in short, a sort of limited circulating medical library to be established.

To-night I have asked the Society to divide the offices of Secretary and Treasurer, and to appoint a separate treasurer, as the combined work is almost too much to be properly attended to by one person. To avoid confusion, the Treasurer could easily be selected from those chosen to act as councilmen.

The Society is indebted to the retiring president, Dr. Little; not only for the able manner in which he has discharged the duties of the chair, but also for the courteous hospitality which the members of council have met with at his hands, the various council meetings throughout the year having been held at his private residence. In conclusion, I have to thank the other office-bearers for the ready co-operation and indulgence which they have shown towards myself, and I have but to express the hope that the coming year will be productive of even more good work, than has been done in the past, and that the Medical Society of Queensland, will continue to prosper, and form a lasting connecting link of concord and harmony between the various exponents of our profession which are its members.

A vote of thanks was passed to the Secretary for his report, and Dr. Little, the retiring president, then delivered his address, which was of a general nature, touching on the work of the Society, the forthcoming Congress, the proposed Inebriates Bill, and other topics of interest.

DR. THOMSON, in thanking Dr. Little for his address, emphasized the Secretary's remarks upon his hospitality to members of Council at their meetings.

A list of members willing to read papers during the coming session was taken, and the allotting of dates was postponed till the following meeting to allow of other names being enrolled.

## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castlereagh Street, Sydney.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, JANUARY 15, 1889.

## EDITORIALS.

### THE INTERCOLONIAL MEDICAL CONGRESS IN MELBOURNE.

THE second session of the Australasian Medical Congress commenced its sitting at Melbourne in the University Buildings on January 7, when the proceedings were opened by the delivery by His Excellency Sir Henry Loch, K.C.B., G.C.M.G., Governor of Victoria, of a sympathetic speech. The visitors were then cordially welcomed by the Hon. D. Gillies, Premier of Victoria, and the President, Mr. T. N. Fitzgerald, delivered his address which was well worthy of the occasion and embodied many practical suggestions, not only as to the special work of the Congress, but for the furtherance of the public well-being of these colonies in matters of health and medical practice. The addresses by the presidents of the various sections were delivered day by day, it being thought better to distribute such important utterances through the whole session than to perhaps surfeit the members by crowding too much important matter for earnest thought into the earlier days. By this arrangement also it was possible for them to be heard by all the members as they could not have been had two or more been given simultaneously. Where all were so excellent it would be invidious to make comparisons, but the address of Dr. H. N. McLaurin, President of the Board of Health of New South Wales, in the section of Hygiene, in which he compared the causes of mortality in the various colonies, and that of Dr. Manning, Inspector-General of the Insane in the same colony, on Psychological medicine were, perhaps, of greater public interest to the lay community. With so short a time and so little space at our disposal it is impossible to do more than generalize in this number, but we hope to return to the subject of the addresses in future

issues. We cannot, however, omit calling attention to the gratification which was expressed at the interest taken by the veteran scientist, Baron Sir Ferd. von Mueller, K.C.M.G., who presided over the section of Pharmacology. The subject of Hydatids was very fully discussed, and eminently useful statistics, experiences and opinions on the treatment of this malady were brought forward by various members. Sanitation was a very prominent subject, and special resolutions were adopted by the full congress on the last day of its sitting, pressing the necessity for reform in sanitary procedure on the various Governments. We believe that the unselfish work which has been done by the medical profession at this assembly of its members is appreciated by the public, and that its recommendations will receive the support they demand. The Congress was indebted to the Chancellor (Dr. Brownless), and the Council of the University for the use of the Wilson Hall, and other rooms of their institution in which to conduct its work.

The proceedings came to a close on Saturday, January 12th, on which day it was ordered that the next sitting of the Congress should take place in Sydney in the year 1892, or at such earlier period as the medical societies of New South Wales might decide, and Dr. H. N. MacLaurin was appointed president. The example set by Adelaide in so hospitably entertaining the Congress at its first meeting has been admirably followed by Melbourne. His Excellency the Governor, the Premier and Ministry, the Speaker, the President and Commissioners of the Exhibition, the President of the Congress, the Mayor of Melbourne, the President of the Victorian Medical Society, and Sir William Clarke, Bart. arranged special entertainments to the Members, and all visitors were overwhelmed with cordial private invitations.

### THE HOSPITAL SYSTEM IN AUSTRALIA.

Among the many incongruities of Australian practise, nothing strikes the newly-arrived medical man more than our hospital system.

Ours seems indeed to be the only profession where lay influence is rampant in deciding what should be purely professional questions, and this is more especially exemplified in the average Australian Hospital Committee.

With the exception of the large hospitals in the Australian capitals, the system prevails of having a Resident Surgeon the primary head of

the institution, the honorary medical officers being subordinate in a more or less degree to him, since he is responsible for the treatment of the cases directly to the Committee. This Committee can, without giving any reason, dismiss him and appoint his successor; moreover, from the Committee there is no legal appeal. To exemplify this, some years ago the Resident Surgeon and Assistant Surgeon of one of the large Victorian hospitals were called on to resign by the Committee of that institution. The reason given that a fractured arm had been unskillfully treated by the latter, and that the former should have set the arm personally. This, notwithstanding that the Assistant Surgeon was a fully qualified man, and by the rules of the institution took the place of the Resident Surgeon during his absence. They were both told that if they did not resign the Committee would take advantage of the agreement signed by them on appointment, and give them notice to terminate it. Legal advice was sought, but no remedy was available, the agreements being perfectly valid, and giving the Committee power to act thus. On the resignations being given in, the Resident Surgeon's was accepted, but the Assistant Surgeon re-appointed, showing that the whole matter was one of pure spite against the senior man, and against whom they could formulate no charge to warrant them in attacking him directly. The entire proceeding being decided on the casting vote of the Chairman, during the absence of the then Mayor of the town, who was known to be favourable to the Resident Surgeon, and who was the only member of the Committee not present. This is no isolated case, and many more could be quoted to show that the system which gives such power to a lay Committee is a bad one. The public *moral* health of our communities is looked after by Police Magistrates appointed by Government, *not* by Committees consisting perhaps of all the publicans and sinners of the place; yet our *bodily*, to some at least as important as our *legal* health, is left to be decided by surgeons elected by a lay Committee, consisting in nearly all cases of persons incapable of judging as to the relative value of the testimonials on which the selection has to be made. In many cases some member of the Committee has a friend or relative who, no matter how unfitted for the position of Resident Surgeon to an hospital, is pitchforked into the billet, and kept there through influence alone. Do not for one moment let it be supposed that we are imputing evil motives to Committee-men who perform a public and necessary duty in supervising the management of our hospitals; what we would direct attention to is that one of their functions is incongruous and superfluous,

and it is this that we would most strongly advocate be abolished; we mean their election of their Resident Surgeons. It seems to us a most unique absurdity that the Governments of the different colonies have never thought it worth their while to exercise some sort of official supervision over such important public institutions as hospitals. The Government subsidise these institutions very largely; in fact to the extent of half their income, yet in this department only of the public expenditure is no official inspection. We would go a step farther, however, and assert that it would be greatly for the benefit of the public at large if Hospital Inspectors were appointed. These should most undoubtedly be medical men of experience, able not only to inspect the mere institution, but the treatment of its inmates; not only the money spent but the value obtained for it. Moreover, they could, if the present system be to obtain, assist the Committees in deciding the value of qualifications and testimonials when those bodies were electing the Resident Surgeon. But it appears to us that the interests of public health would be best served if the Governments of the various colonies took the appointments of the Resident Surgeons into their own hands. There would then be the foundation of a medical service that in each colony would educate its members up to the standard requisite for the control of the larger public institutions, and afford far more incentive to useful hospital work than is now the case.

Moreover, it is well known that in many cases the Hospital Surgeon is the only medical man for many miles, and if he were a Government officer, belonging to an established branch of the public service, the residents of the country districts would most assuredly have far fewer instances of drunken and incapable practitioners which, regretfully we say it, are by no means unknown throughout Australia. Not only this, but the mere fact of their institutions being liable to inspection would render it necessary for the Resident Surgeons to keep themselves acquainted with modern improvements in treatment, and might remedy such instances of incapability as we have ourselves witnessed, by the Inspector recommending the withdrawal of the Government subsidy until a competent surgeon was appointed. No doubt in the large majority of instances the Committees work with the best of intentions, but they are not fitted to assume professional functions, such as deciding on the competency or otherwise of their surgeon. They are most necessary and most useful, but are liable to be biased in their dealings with their professional adviser and servant by local surroundings and personal jealousies. A system such as we suggest

would obviate this; and we firmly believe would benefit the public. Let us therefore urge those of influence among our readers to make some move in the matter, and if it is impossible to initiate our scheme, to aid in preventing our hospitals from continuing with no professional supervision, by the appointment of two or more Inspectors of Hospitals in each colony.

### CONSUMPTIVE TRAVELLERS.

Respecting the interesting paper under the above heading by Dr. G. R. Macmullen, M.A., LL.D., in our November issue, we received intimation from both the New South Wales Board of Health and the Central Board of Health of Victoria, that the matter would be considered at an early meeting, and since then we have received the following letter from the New South Wales Board of Health which we here reprint with much pleasure, as it shows that this Board fully recognizes the great importance of the subject:—

BOARD OF HEALTH OFFICE,  
127 MACQUARIE STREET, SYDNEY,  
20th December, 1888.

SIR.—Referring to my letter of the 13th instant, acknowledging receipt of yours of the 1st idem, transmitting an extract from *The Australasian Medical Gazette*, entitled, "Consumptive Travellers," I have now the honour, by direction of the Board of Health, to inform you that this matter has been brought under the attention of the various steamship companies with a request that they will take the necessary action to remedy the evil referred to in the article.

I have the honour to be, SIR,  
Your obedient Servant,  
EDMUND SAGER,  
Secretary.

THE HON. J. M. CREED, M.L.C.,  
SYDNEY.

### LETTERS TO THE EDITOR.

#### A QUERY.

(To the Editor *A. M. Gazette*.)

Dear Sir,—What is the correct procedure in the following case? :—

A man commits suicide by shooting on the 28th ult. I am his regular medical adviser; in fact I was treating him four days before his death, and this is not disputed. I receive no notice of the death, but the coroner takes out with him the Government Medical Officer of the district, who performs a *post mortem*. I contend that I ought to have been summoned, and if a *post mortem* were required, that duty devolved on me by rights. I submit the Coroner (or somebody else) exceeded his duty in this case, to my detriment; I was utterly ignored.

As the subject is of importance to every member of the medical profession, I should like to read your opinion on the subject and advice for the future. Have I no redress?

Yours truly,  
KAPPA.

Dec. 12th, 1888.

[In this case we think our correspondent was unjustifiably overlooked, and that, in the public interest, he should have been directed by the Coroner to make the *post mortem*, and give evidence at the inquest. The mental state of the deceased was an important element in the inquiry, which state was within the knowledge of our correspondent. It must not be forgotten, however, that a coroner has full power to exercise his discretion as to the calling of medical witnesses, and the possession of this power is necessary. The thing to be regretted is the absence of discretion, with which the power is exercised by men unfit for the position they hold.—ED. A. M. G.]

### MEDICAL ETHICS.

(The Editor, *Australasian Medical Gazette*.)

Sir,—I take the liberty of briefly recording the following transaction, thinking that possibly you may consider it deserving of some comments in the *Medical Gazette*:—

D buys a practice from N. W, who had recently been in treaty with N, (after obtaining particulars by personal interviews and correspondence), did not come to terms. Within a fortnight of D settling down to practice in N's house, (the leasing of which was a part of the transfer), W settled down to practice in a house immediately adjoining. This is no hypothesis, but an actual occurrence.

In ordinary business this, D thinks, would be looked upon as hardly a fair proceeding, and the case is unique as far as he personally knows. Notwithstanding that, fortunately, D does not consider the situation as overwhelmingly formidable, and still retains sufficient confidence in the honourable instincts of the profession to believe that like occurrences would be rare; yet he is of opinion, that apart from personal considerations, comments in your journal might have the effect of inducing medical men in similar circumstances to exercise even more caution than was considered necessary by

Yours obediently,  
FAIR PLAY.

[In the case as put by our correspondent, we think that W. did not exercise that scrupulous regard for what was due to the interests of his professional brethren, N and D, which might reasonably have been expected of him. There has, however, been nothing illegal in his action, or an unreasonable price demanded by the vendor of a practice might unfairly debar a practitioner from settling in a place for practice in which he particularly desired to reside. If, however, N, having asked certain terms from W, which the latter considered unreasonable, afterwards sold to D, at a less rate, without having offered the practice at the reduced price to W, we certainly think there would be great excuse for W's subsequent action.—ED. A. M. G.]

## SNAKE POISON.

(To the Editor of the A. M. Gazette.)

SIR,—Kindly allow me space for reproducing some old facts on the above subject. "On procuring a large Cobra di Capello, with the venomous teeth and poison bag entire, it was made to bite a young dog in the hind leg, for which no medicine was made use of. The dog, upon being bit, howled evidently for a few minutes; the wounded limb soon became paralytic; in ten minutes the dog lay senseless and convulsed; in thirteen minutes he was dead. A dog of a smaller size, and younger, was bitten in the hind leg, when he was instantly plunged into a warm nitre bath prepared for the purpose. The wound was scarified and washed with the solution of lunar caustic, while some of it was poured down his throat. The dog died in the same time and with the same symptoms as the former. After an interval of one day, the same snake was made to bite a young puppy in the hind leg; but above the part bitten a ligature was previously tied. The wound was scarified and treated as the other. This dog did not seem to feel any other injury than that arising from the ligature round his leg. Half-an-hour after being bitten the ligature and dressing were removed, the dog soon began to sink, breathe quick, grew convulsed, and died."—Sir John Forbes, *Oriental Memoirs*, ii, 329, pub. 1832. "Mr. Robert Gambier, chief of Baroche, was incredulous of talismen, &c. One of his under-gardeners, working between the pavilions, was bitten by a cobra di capello and pronounced to be in danger. Mr. G. was then holding a council in an upper pavilion, and at the desire of Mr. Perrott immediately sent for Lullabhy, without informing him of the accident, of which he remained ignorant until ushered into the chief's presence. The gardener was lying on a slight bed of corn rope, in a verandah adjoining the council room. The poor wretch was at this time in great agony and delirious; he afterwards became torpid and speechless; still L. was not permitted to commence his operation. Mr. G. examined the man's pulse by a stop watch, and when convinced his dissolution was inevitably approaching, he allowed L. to exert his influence. L. prayed, waved his dagger over the expiring man's head, not touching. The patient was motionless some time, in half an hour heart appeared to beat, circulation quickened; within an hour he moved his limbs, and recovered his senses. Cured in three hours. Weak for some days." (Loc. Cit. p. 272.) If this is the natural course of snake poison (without stimulants, &c.), it bears out Travers when he says sleep will kill where alcohol destroys.

JOHN REID, M.A., M.D.

Melbourne, Dec. 1888.

WE have been requested to inform the profession in Sydney and suburbs that Miss Forrester, certificated nurse, trained at the Hobart General Hospital, where she was employed for nearly three years and received a silver medal for successful nursing in typhoid fever cases, has settled in Sydney and would be glad to undertake the nursing of cases, either medical or surgical. Letters for Miss Forrester, forwarded to the office of this journal, will be promptly attended to.

LARGE Shipments of Surgical Instruments and Appliances just landed, ex P. and O. R.M. steamers "Massilia" and "Oceana;" also, by Orient R.M.S. "Oroya," a fine assortment of the latest medical books, among others a full supply of the new edition of Ringer's THERAPEUTICS (1888), published at 15s, postage, 1s 3d. L. Bruck, Importer, Sydney.

## PROCEEDINGS OF THE INTERCOLONIAL MEDICAL CONGRESS IN MELBOURNE.

THE second session of the Intercolonial Medical Congress of Australasia was successfully inaugurated at the Wilson Hall, Melbourne University on Monday morning January 7, in the presence of a large and representative assemblage. His Excellency, the Governor, accompanied by Lady Loch, was received at the entrance by Mr. T. N. Fitzgerald, F.R.C.S.I. (President of the Congress) and Dr. Brownless, C.M.G. (Chancellor of the University) and conducted to the dais at the south end of the hall, which was also occupied by a number of gentlemen holding high official positions. Up to January 5th 528 members had paid their subscriptions, and to these must be added 20 associated members. Of the total number 326 are Victorian practitioners, and exactly 200 are resident outside of this colony. The 200 are distributed as follows:—New South Wales 91, South Australia 39, New Zealand 26, Queensland 18, Tasmania 12, Western Australia 5, England 6, New Guinea 1, India 1, Dutch Indies 1, and Finland 1. However, as new members were constantly enrolling themselves even after that date, the total number of Congress members exceeded 550, of whom fully 400 were present.

## THE GOVERNOR'S OPENING SPEECH.

HIS EXCELLENCY THE GOVERNOR was requested by the President to formally open the congress. He said: Mr. President and Gentlemen—Your meeting here in congress is one of the most important of the many very interesting events that will make this period memorable in the history of Australasia.—The result of this congress will be, I venture to believe, as greatly to the advantage of medical science throughout Europe and America as it will be productive of great good in the country in which it has assembled. Eminent medical gentlemen have come from India and distant countries, as well as from all parts of Australia, to take part in the deliberations of this meeting; men whose reputation as medical scientists will give to the papers which they will submit to the congress a position of commanding influence upon some of the greatest medical questions of the day. The range of work that comes within the compass of medical science is so vast that no one mind can grasp and treat in an exhaustive manner the several branches in all their varied bearings, while in the busy walk of practical life few medical men can afford the time requisite for a close examination of more than one or two subjects of special study. These meetings are therefore of untold value, where the mental wealth acquired by individual scientists is collectively submitted to the critical analysis of their fellow workers whose education, experienced observation, and general knowledge properly fits them to discuss, consider, and estimate at their proper value the deductions that may with safety be drawn from the careful investigation of the specialist. The amount of work which the preparation for a meeting of this character entails can only be appreciated when we reflect that the papers to be read are the outcome of years of unremitting study and observation, devoted to the noblest end to which the greatest intellects can be applied—the amelioration of human suffering in all its varieties and forms of misery—and thus indirectly to the strengthening and development of the brain power of the world, on which the ever-growing requirements of the day make an ever-increasing demand. It is perhaps a fitting close to the rejoicings with which the

completion of the centennial of Australasia has been commemorated that this congress should be now assembled in Melbourne. The past hundred years are replete with historic events which have created a British empire in the Southern Hemisphere; but marvellous as has been the progress which has led to this development, it is not so marvellous as the advance that has been made during the same period in the knowledge and application of medical science; and if the experience of the past hundred years may be accepted as being any guide as to what the discoveries may be in the future, then those who may hope to live for the next thirty or forty years may revel in intellectual anticipations as to what they may then know and witness. While the principal objects for which the Medical Congress has assembled will without doubt receive every consideration and be kept carefully in view, I trust the members of the congress will likewise accept my assurance that it is our anxious desire to offer to all our most cordial welcome, whether they come from distant lands, from the sister colonies, or from our own country districts, as also to those whose familiar faces we gladly recognise as belonging to our own immediate neighbourhood; and I venture to submit as my own personal medical contribution for the consideration of this great congress, the proposition which I trust may be carried without a dissentient voice, that health is largely promoted by a well-proportioned amount of relaxation and enjoyment of this world's pleasures—(cheers)—and I am not sure whether the rule advocated in this colony—eight hours' work, eight hours' sleep, and eight hours' play—should not be adopted by this congress as the great panacea against all ills. (Cheers.) I trust I may be permitted to congratulate Mr. Fitzgerald—(cheers)—whose untiring efforts have in so large a measure contributed to bringing together so many eminent gentlemen, upon what I may safely, in anticipation, call this very successful meeting of the Medical Congress; and I congratulate myself upon its being one of the happy incidents connected with the position I have the honor to occupy in this colony that I am permitted to be so far connected with this great and important meeting as to have been requested to perform the duty of declaring the Medical Congress open—a duty which I have now the honor to fulfil, with the most sincere and heartfelt good wishes that the result of its deliberations may tend to the advancement of science and to the benefit of mankind. (Cheers.)

The General Secretary (Professor Allen) then read the report of the Executive Committee, which was adopted by acclamation on the motion of Dr. Verco (Adelaide), seconded by Dr. Batchelor (Dunedin).

The PREMIER (Mr. Gillies) was then requested to welcome the visiting members. He said:—Your Excellency, Mr. President, Ladies and Gentlemen—I have been requested to offer a cordial and hearty welcome on behalf of the Government of the colony of Victoria to those gentlemen who have come from the other colonies and elsewhere for the purpose of attending this congress. (Applause.) It must have been to them no small sacrifice to leave their homes, when they were probably engaged on important work to attend the conference, but they have the satisfaction of knowing that they will probably be engaged in still more important work. I venture to think that no higher duty could be performed by medical gentlemen than to attend a congress where matters of the greatest moment will be discussed. The work of medical men is all important, for what better office can there be than the amelioration of suffering humanity? I feel quite confident that the labours of

this congress will be commenced in a desire to ascertain the truths of medical science, and to obtain some more information than members possibly have at present with reference to the more difficult questions that will be brought up for discussion. The labours of the members ought to do good, and I am quite sure that they will. I trust that members generally will be animated by a desire to help forward the greatest mission that any body of men can possibly be engaged in, and that is the promulgation of sound laws for the protection of health and the removal of disease. (Applause.)

#### THE PRESIDENT'S ADDRESS.

The PRESIDENT then delivered the following inaugural address:—When, sixteen months ago, at the first medical congress ever held in the Australasian colonies, I was chosen president-elect of the next similar gathering, I was very proud to have obtained such an honour. I received with feelings of profound gratitude the expression of confidence and regard that my fellow-workers in the noblest of all vocations were so good as to convey to me. And now as I stand before you, who have come hither from every part of Australasia, to take counsel together on matters of grave import, I feel that I have reached the crowning point of my ambition; for I need hardly say that although material success is very properly an object we may all laudably strive to win, if only we strive fairly and honourably, a still higher prize is that which is conveyed in the willing trust of a whole brotherhood. I wish, therefore, here to declare how deeply sensible I am of the honour of which I was then made the recipient, and how proud I am to occupy the place that now I fill. Let me, however, sincerely assure you that I feel conscious of considerable diffidence in having so closely to follow the late president, whose eloquent address in Adelaide won from us such enthusiastic and well-merited recognition.

And now let me offer you all a cordial welcome to Melbourne, which some of you, I dare say, behold for the first time. Our city has been called "Marvellous Melbourne," and no doubt for some reasons it deserves the title. It is very far from perfect, as we who have lived in it so long well know. To it, then, such as it is, I bid you welcome. We will endeavour to make your stay in it as agreeable as we can, so that when you leave us you may carry away not unpleasant reminiscences of your visit.

Gentlemen, before proceeding further, permit me to offer a few words of explanation. You are no doubt aware, before we left Adelaide, it was agreed that the congress should be convened in 1890, and this resolution would doubtless have been adhered to had not the political authorities of the day suddenly decided to hold the Centennial Exhibition and invite all nations. When the commissioners were debating their preliminaries a proposition was started that this would be a very favourable opportunity for holding the next session of the congress. The suggestion at first encountered serious opposition from many who are generally foremost in support of any movement that tends to the advance of medicine, and whose opinions deserved most attentive consideration. The change contemplated was no doubt an important one, more especially as it involved a direct departure from the resolution agreed upon in Adelaide; but it was urged that, although a year's time was a very short interval between the two meetings, and allowed but a brief space to collect fresh facts and arrange material, yet the chance was too opportune to be missed. At another time the means of travelling from distant parts would not be so easy, and

assistance from other sources might not be so readily attainable. Consequently it was determined, on a full vote of the profession, to alter the Adelaide programme, and to convene our gathering this year. The date being fixed, those who had opposed the alteration the most strongly very generously consented to act with the larger section, so that we have since worked together in perfect harmony in making the preliminary arrangements. I am delighted to say that the fear expressed by the opponents to the change, that the time would be too short to collect sufficient material, has not been justified by results, and that we have experienced from all quarters a most gratifying readiness to co-operate with us in making the congress an unqualified success.

It has been asked, what are the especial advantages to be looked for from an Australian medical congress? What practical good is likely to come from the gathering together of medical men in the southern lands? Are there, it is demanded, any diseases peculiar to Australia, or affections which have not been investigated exhaustively by the highest authorities in Europe? Do the conditions of climate and the social habits of the people modify diseases? Or do certain affections, which are common to all latitudes, assume here particular characters that differentiate them from the aspect they present under other geographical circumstances?

I do not forget that on the other side of the world, and especially in those large centres of human life where the perils of existence and the factors of disease are so many and so constant, the finest intellects are continually engaged investigating in every branch and every branchlet of the compound science of medicine. They have abundant means, elaborate appliances, the fullest opportunity, and uninterrupted leisure at their command, to work out the problems which continually are spread before them. The microscope enables them to make additions every day to the sum of that division of the medical sciences which half a century ago, or even less, may be said to have had no existence. Histology is thus always revealing to them, and through them to the whole medical world, something new. The chemist, in like manner, is for ever throwing light upon etiology, pathology, and, especially in its larger significance, therapeutics. There are very many highly accomplished men content in their enthusiasm to spend the spring-time and early summer of their lives in the exhausting work of hospital duty; happy and well enough rewarded in their own esteem if they but do now and then, amid the thousands of routine cases they have to treat, light upon some new clinical fact, or discover some hitherto unrecognised action of a drug. Surely, asks the pessimist querist, your local medical societies suffice for the report of unusual cases, and the exhibition of anatomical peculiarities or rare distortions; why then, with puny strength, endeavour to emulate the mighty efforts of the northern hemisphere, having in remembrance that some of their endeavours have not been crowned with perfect success?

We do not, we cannot hope to bear comparison with the great medical gatherings of the congresses or associations in Europe. But with all becoming humility, and with the admission that we cannot hope for some years successfully to rival our brethren in the healing craft in the old world, I have yet to say that we have here 2000 medical men, educated and trained in the same way, and qualified up to the same limits, as are those at home. We have amongst us representatives of nearly every medical school or college in Europe, who have opportunities of studying and treating disease and of maturing their knowledge, both in private and hospital practice. Then again, as we all well know, in many medical and surgical affections, the practice adopted

by some of the leading men in the different colonies is decidedly at variance (whether rightly or wrongly) with the views held by home authorities. Surely, therefore, we are able to add something to the sum of that knowledge which we have as a kind of joint stock, and to the enlargement of which it should be both our duty and pleasure to contribute.

To reply further, it should be remembered that though the habits and conditions under which we live bear a social similitude, yet they are by no means identical with those existing in Europe. In the older civilisations and in America, we see the working population of the cities crowded together in a manner utterly unknown to us. The facts lately published by the Special Sanitary Commissioners of the *Lancet*, on the sweating system among tailors in Liverpool and Manchester, must be an incomprehensible revelation to the native-born of these colonies. In the rural districts of the old country, the labourers are ill and insufficiently fed, ill-clothed, over-worked, and everywhere subjected to the extremes of cold or heat in their seasons. The wealthy, for the most part, especially the females, are fashion-worshippers, self-indulgent, and almost entirely unemployed, the more active alone finding vent for their energies in eleemosynary efforts.

With us, on the other hand, the cities are widespread (too much so if anything), each man, even to the poorest, lives in his own house, animal food is plentiful and cheap, the hours of labour are short, and summer and winter are much the same, except that in their seasons occasionally the hot days are hotter and the cold days are colder. Such weather as is implied by the terms zero, blizzard, continuous rain, ice storms, &c. we are acquainted with only through newspaper description. On certain days it is true the heat is apt to be oppressive, specially to the inactive, and trying to the aged and sick, yet it can never be said to be unbearable, or inimical to life. Then again, the difficulty and often impossibility of ensuring constant domestic service, compel even the most opulent of this community to do for themselves what they would be glad to pay others to do for them, and thus in the performance of household work, our gentlewomen procure for themselves an amount of bodily exercise, which, although unsought and sometimes unwelcome, is a distinct benefit to them, and there can be no question that it saves them from many ills to which they would otherwise be subjected. Thus, then, in this continent we find men of all classes living under the most favourable circumstances. Climate nearly all that can be wished for, healthy inheritance, both mentally and physically, ample space for every one, and well required industry prevailing everywhere.

Surely with these happy surroundings, which exist, as far as I am aware, to such an extent in no other place, we have a spacious field, especially our own property, for investigating disease as it occurs uninfluenced by the many causes which excite and maintain it at home. For instance, we have long been taught, rightly or wrongly, that scrofula and tubercle are affected by squalor and dirt; that phthisis is favoured by close vitiated atmosphere and cold night air. These causes are present but to a slight extent with us, yet occasionally we find scrofulous impregnations excessively virulent; while phthisis is as common with us as it is in England, and decidedly more so than in Canada and Scotland.

Again, here in this land, certain acquired constitutional diseases in the tertiary ulcerative forms, are comparatively mild affections, and seldom present that grave character which is such a continual source of anxiety to the European practitioner. As a corollary to the limited



intensity of such affections, we would expect to find skin diseases rare and mild in character. Is this the case? We are a busy people, yet melancholia is a common form of insanity to be met with in our asylums. Then, again, do we enjoy an immunity from the nervous diseases so frequently to be met with in the great manufacturing and mercantile centres of Great Britain? And if we do not, what is the explanation? It is not difficult to discover, therefore, that the field for observation is here very wide, and that in whatever direction of special knowledge we may look there is an abundance of matter to interest and occupy us, without at all travelling over trodden paths, or turning over ground which has yielded up all its nutrient elements to the cultivator.

There are a number of similar questions we can ask ourselves, and our peculiarly happy circumstances will perhaps allow us, by a process of elimination, to throw a light on obscurities, and to regard causes from a point of view from which, without these advantages, they cannot be seen by the profession at home. So, too, should we ask ourselves, cannot advantage be taken of our almost unlimited space to bring under control such distressing social maladies as habitual drunkenness? Then, again, is not this the opportunity to come to some agreement as to where a suitable mountain residence can be found for the delicate and consumptive? Whether a better treatment may not be advised in counselling protracted change—summering in New Zealand or Tasmania, wintering in Queensland, and spending the intermediate time in one of the other colonies?—for we have all climates with us.

To arrive at any definite conclusion on these and many other matters, a consensus of opinion is required, and this can only be obtained by such a gathering of the profession as I see before me now. If our environments are healthful, and certainly they should be so, the young manhood of this country, who, for the past few years only, has become an influence in the councils, should present a type of the highest class. His birthright, the political freedom which has been handed down by his fathers, his inheritance, the home life, the decorum and gravity of a race bred under a cold ungenial sun, untrammelled educational establishments at his very door, no class distinction to sneer him down, and every opportunity to gratify any inclination either in the playground, the workshop, or study, the Australian native should stand forth as the creature best able on earth to resist disease, and the most willing to listen to wholesome advice on sanitation. His love of outdoor sports, engendered by the easy hours of labour and the many open reserves, saves him from the several temptations which surround life at the time of its puberal development, whilst the constant sunshine, the frequently recurring holidays, and variety of amusements relieve his toil from the chilling monotony that in other countries is the parent of habitual intemperance. Why then, in such an apparent paradise, peopled by those who ought to be Hercules and Apollos, are our death rates so high? This is a question that, doubtless, the congress will inquire into, and its deliberations will, I trust, throw some light upon those vexed matters of drainage, ventilation, and other items that so intimately affect the sweetness and healthfulness of life.

I wish, however, to draw attention to one or two points which, though perhaps well known to the profession, are not generally recognised by the public at large. In all English-speaking communities the mortality bills are swelled principally by three affections—alcoholic intemperance, tubercular deposits, and typhoid fever—scourges in the main preventable; but

the remedies for which, either from the expense, or from other causes, we will not boldly and manfully face.

First then, with regard to drink. You all know how inimical to treatment its effects are, and how great is the misery it occasions. I have no wish to read you a tectotal lecture; there is, however, one peculiarity which stands out rather prominently, and which I think should have weight with us all, when, as medical men, we are called upon to prescribe spirits as a drug; and that is the fact that alcohol is much more potent with us than it is at home. If we turn to the statistics that Mr. Hayter annually furnishes to the Government of Victoria, we find that the deaths set down to drink are numerous compared with those of even the most intemperate countries, and such a calculation would naturally lead to the assumption that we Australians are an extremely drunken people. I do not desire to go out of my way to find excuses for much excess in this particular, nor would it be proper for me to say that there is no drunkenness in Australia, but I assert with the strongest emphasis that habitual drunkenness is an exception with us. Visitors from abroad, who have been to any of our great gatherings at military displays and racing carnivals, or who have seen the crowded attendances at athletic meetings in any of the colonies, must have noticed the absence of drunkenness and rowdiness. What really is the case is that alcohol, in whatever form it may be taken, is not suited to the climate or the conditions of the people, so that hepatic and renal affections are sooner and more frequently engendered by its use than they would be under the same circumstances in a colder country.

Looking at the habits of European populations, however, I cannot but regard it as a slander upon our manhood to charge them with systematic drunkenness. A great number of our native born youths are total abstainers from birth, and, while not forgetting the intemperate opinions sometimes expressed by temperance advocates, I must admit that temperance societies have worked a good deal of useful reform. As a food in the low delirium of fever, and as a means of preventing waste of tissue in erysipelas and kindred diseases, and for the aged, alcohol is doubtless essential, and of great service. Yet the death-rate ought, I think, to teach us the necessity of care in the use of intoxicating liquor, and that, as medical men, we should be very cautious, far more so than our brethren have need to be in colder climates. What we have to regard is the great probability of its continued and over-moderate use being prolonged when the necessity for its employment has ceased, and of its setting up local congestions, which, in time, destroy the functions of the organs they affect.

Of phthisis and typhoid fever I have already said that the former appears to be nearly as common in Australasian as in English towns; and typhoid, both in urban and rural districts, is nearly of twice as frequent occurrence. I think it offers occasion for the gravest consideration to discover how, in a country so richly endowed, and with a climate so genial, we should yet be afflicted to so terrible an extent with two diseases of parasitic origin, both of which, pathologists assure us, are eradicable. It is curious to notice how the etiology of phthisis has varied among physicians from time to time. In my early days it was impressed upon us that consumption chiefly arose from defective ventilation, and the inhalation of irritant particles. Then came the catarrhal or pneumatic organs—neglected colds and so forth—and now we find that neither nor all of these reasons will suffice to account for the large bills of mortality from phthisis in this land. In my opinion, next to its hereditary inception, the greater



part of phthisis will be found to be associated with defective drainage, and this, I believe will be proved by bacteriology. I cannot but think, therefore, that it will always be endemic with us until we devise some proper and complete method of carrying off our sewage and fluid house refuse.

Typhoid fever is with us a true *opprobrium medicorum*. It is with us, of us, among us, upon us. It is a spectre we apparently cannot exorcise. It is truly "the pestilence that walketh in darkness, and the destruction that wasteth at noonday." It is at once a terror and a reproach. It defies legislation and administration, it laughs at boards of health, and triumphs ruthlessly and always. Are we never to cope with this terrible affection? As far as Melbourne is concerned, we hope much from the commission which is now holding its meetings; and we trust that whatever scheme is decided upon, it will be adopted without the long delay that generally follows the decisions of such bodies. But in the meantime, the same things go on. Streets are marked out, and houses are built without the semblance of drainage. Then the warm weather comes, and fever stalks each year more greedily and viciously than before. No doubt the section constituted to discuss these matters relating to hygiene and public health will indicate what steps modern sanitation should take towards the suppression of this conspicuous evil. The views of medical men and health officers are always valuable when they take some practical step, especially on such a subject as public health. On such matters they alone, from their educational training, are capable of expressing opinions worth listening to. I sincerely trust our health boards will derive information from the deliberations of the section of hygiene.

Gentlemen, all branches of our profession seem steadily to advance. Annually some new surgical measures are contrived, some new drugs are introduced, some disorders discriminated. What future is there for sanitation? Sanitation, unlike other divisions of our art, must go hand in hand with the educational progress and mental improvement of the people. Without the schoolmaster, all efforts we could make must inevitably prove futile. An intelligent conception of its purposes by the authorities, both parliamentary and local, is absolutely necessary. It is here that I hope much may result from such a gathering as this congress, for in all matters that relate to medical and sanitary requirements it seems to be nearly an invariable ruler for legislative enactments to be considerably in arrears. With borough and shire authorities, I believe these bodies do, in the main, the best their lights permit them, but the insanitary conditions of their respective localities are attributable, I conceive, to either a want of information, or a reluctance to exercise their powers. Because diphtheria happens to be absent for a time from their district, they fail to see danger in a cesspit, or the necessity of milk inspection, and so forth. Doubtless the advanced education the young are receiving, in at least the better class of schools, the instruction in the elements of physiology and the general principles of hygiene, will in time have its effect on our future statesmen and councillors. And in this direction I think much benefit might accrue from the appointment of a few thoroughly trained and carefully chosen sanitary instructors, whose duty it should be to travel from town to town, and even from house to house, with the object of teaching the principles and the advantages of health laws, and the consequences of a disregard of them, for it is certain that the value of cleanliness cannot be properly understood until the dangers of filth are comprehended.

I should like while on this subject to say something in strong praise of the hygienic arrangements that have been carried out in Adelaide. The method of drainage appears to be as nearly perfect as it can well be, and as there is a large model of the system in the South Australian Court of the Exhibition, it would be well that everyone interested in this subject should see it. If it be possible to adopt in this much larger city the same system, I am prepared to say that the death-rates would be lowered to an extent now hardly dreamed of. Nor is the incidental advantage in connection with this system of the disposal of the sewage to be lost sight of. The Adelaide sewage farm is a very joy of scientific agriculture. In Sydney they are commencing with earnestness to drain their busy city; and although the underground drainage of Melbourne is at present little more than rudimentary, we have at last made a beginning.

But what is more encouraging, and prognosticates well for the generation that is to follow us, is the lusty outdoor life, and the sturdy games the Australian so dearly loves. Amongst those who ever have seriously revolved the subject in their minds, some doubt must have arisen whether the youth of these great colonies would walk in the steps of their parents, or influenced by a hotter sun, follow in the wake of their American kinsmen, and forsake the green sward for light amusements, ease, and luxury. I rejoice to say that this question is entirely set at rest; The Australian's prowess on the river and the cricket-field has settled that matter, and he promises, as far as physical development goes, to even surpass his fathers. It is rather extraordinary that the out-door life and national games of the mother country should have taken such a hold on the young folk of Australasia, for I believe in no other part of the world have the sons of the Anglo-Saxon or Celtic emigrants done the same. Certainly, in America or South Africa, neither cricket nor football is generally played. Now, this love of these manly games must have an influence for good on the manhood of this country. Personally, I have no sympathy with those who would decry these athletic exercises, either because at times they may be carried out too roughly, or sometimes are accompanied by some degree of danger. The very roughness of football is an element of good. It develops courage and good temper; one hears too much nowadays about gentleness and the velvet hand. We require a little fibre, which these games tend to impart. When I look at the footballer ready for action, I cannot help admiring his muscular frame, and sympathising with him in the pride he takes in his sturdy limbs, his form, and activity. Contrast him with the boy one meets with on the Continent, parading through the streets. Which is the more likely to grow up a self-reliant, useful citizen, the footballer or the young gentleman who spins his tops and bowls his hoops in gravelled enclosures? Depend upon it, these games are important factors in the formation of the moral tone of this country. We should encourage them to the best of our powers, and endeavour to allay the fears of timid over-anxious parents. If a few limbs are broken annually, and even now and then unfortunately a death occurs, it would be better that four times the number of casualties should be told, than that our boys should grow up hypochondriacal and dyspeptic.

Looking round this assemblage of representatives of the great guild of medicine, drawn here from every province of Australasia, I cannot deny myself the pleasure of thinking that we are all students, still engaged in the work upon which we entered, some of us, many years ago. We have had our ambitions, our difficulties, our trials, our disappointments, and now

and then our successes. We have been engaged in the hard business of living; we have had to contend with opposition on many occasions, and sometimes we have had good reason to believe we were not too fairly dealt with. However, I am sure it has been the consolation of all of us to feel, that in the acquirement of the knowledge necessary for the exercise of our craft, we commanded a source of enjoyment that nothing in the way of fret or ill or mere professional failure could take from us. We have thus all added something to the common store of medical knowledge. We have in this way experienced a delight compared with which the greatest material success holds only subordinate place. Like another God-like attribute, the *ars medendi* "blesseth him that gives and him that takes." It is a delight to make discovery in our science; but I am sure it is a delight still greater to know that the discovery may be of service to our professional brethren in relieving suffering humanity. It is thus a privilege to thank God for, that our domain of discovery can never be exhausted, and that no matter how great may be the researches of others, there is still left room for us to go on exploring. It is the very glory of medicine that it is not finite. It has been brought against it as a reproach that both its principles and its practice are always undergoing changes. I reply, with a feeling of triumph, that these changes are the very evidences of our progress. If we have a motto at all, it is "Onward." It is not our despair, but our boast, that medicine is not an exact science. We are not content with what we have done, but we look forward to the greater, the better, and the higher doing. "Still achieving, still pursuing," we "learn to labour," and if we "wait" at all it is not in the dull apathy of contentment at what has been done, but in the belief that the "Greatest is behind." It is with this feeling, this hope, this ever constant and unswerving faith that I regard the coming together of my brethren on this the opening day of the second session of the Medical Congress of Australasia.

After loud and prolonged applause, the Hon. J. M. CREED (Sydney) moved a vote of thanks to the president for his thoughtful and useful address. (Applause.) Mr. Fitzgerald, at the head of his profession in Victoria, was fitly appointed president of the second session of the Intercolonial Medical Congress of Australasia, and his medical brethren were proud to elect to that high and honourable position a gentleman who was not only a most illustrious surgeon in Australia, but who had also a world-wide fame. (Applause.) This was an age of federation, and to the medical profession of Australia belonged the credit of making the first practical suggestion of a federal character—viz., the establishment of a system of federal quarantine, the absence of which was dangerous to the health, commerce, and prosperity of the colonies. (Applause.)

DR. STIRLING (Adelaide) had very great pleasure in seconding the vote of thanks to the president. No one was better qualified than Mr. Fitzgerald to speak with authority to the Intercolonial Medical Congress, and his address was marked by that thoughtful suggestiveness which characterised all his work. (Applause.) The president had also shown to the public that a medical address need not be dry and uninteresting. (Laughter.) Mr. Fitzgerald's name was a household word, not only in Victoria, but throughout the Australian colonies, and it was therefore unnecessary for him to say one word to induce the congress to carry the vote of thanks by acclamation. (Applause.)

The congress rose *en masse*, and cheered long and lustily.

THE PRESIDENT said:—Your Excellency, Ladies, and Gentlemen,—I really feel too overwhelmed to say anything in acknowledgment of your most hearty vote of thanks. I can only sincerely thank you, and I do thank you very sincerely. (Applause.)

DR. MANNING (Sydney) proposed a vote of thanks to His Excellency the Governor for the kind and gracious manner in which he had opened the congress, and also for his address. His Excellency had shown such a warm feeling for the profession, such a sympathy for its work, and such a general appreciation of its higher aims and objects as must have gone straight to the heart of every member of the congress. (Applause.)

DR. THOMAS (Adelaide) seconded the motion with great cordiality. His Excellency had honoured the medical profession by his presence at the congress, and its members had also to thank him for the generous and hospitable welcome he had given them. (Applause.)

The motion was carried by acclamation.

His Excellency the GOVERNOR, in acknowledging the compliment, said:—Dr. Manning, Dr. Thomas, Mr. President, Members of the Congress, and Ladies and Gentlemen,—I thank you very sincerely for the kind reception which you have given to the vote of thanks which has just been accorded to me. I can assure you it has given me very great pleasure to come here to-day to declare this important congress open, and I only wish I may be permitted to be present on some of the occasions when the valuable papers, of which I have seen a list, will be read before the congress. Dr. Stirling referred to the fact that Dr. Fitzgerald's address was so interesting that it could be appreciated by laymen as well as by medical gentlemen. I can assure you that many of the papers which will be read at the congress can and will be appreciated by laymen just as much as by gentlemen of the medical profession. (Applause.) Although they may not be so well understood by laymen as by medical gentlemen, they will be equally interesting to laymen, and as highly appreciated by them. Dr. Fitzgerald, in his address, has referred to many matters of very great importance—of importance not only to the medical profession and the world at large, but of special importance as affecting this colony, and this great city of Melbourne in particular. (Hear, hear.) He has referred to those questions and sanitary considerations which are now occupying the attention of the Government and of the public very deeply, and I trust that the deliberations of the congress on the important questions that may arise will lead to wise and sound conclusions. (Applause.) I thank you very sincerely for the cordial reception you have given me, and I can only say on my own behalf, and on behalf of Lady Loch, that we are looking forward with very great pleasure to receive you on Wednesday night. (Applause.)

The PRESIDENT then declared the congress adjourned until 8 p.m., at the Freemasons' Hall.

#### RECEPTION BY THE MAYOR OF MELBOURNE.

At half-past 1 o'clock the members of the congress, with other guests, were received by the Mayor of Melbourne at the Town-hall. The reception took place in the council chamber, and at 2 o'clock the guests were invited to partake of luncheon in the main hall. Amongst other guests were Sir Henry Parkes, Premier of New South Wales, and Mr. Johnson, Minister for Education in South Australia. The speeches were of an important nature, and touched large questions, particularly intercolonial federation, sanitary reform, &c.

SIR HENRY PARKES, in responding to the toast "The Governments of the Sister Colonies," said that

one of the compensations he had met with in visiting Melbourne at this time was making the acquaintance of the distinguished president of the Medical Congress. (Applause.) He went to the opening of the congress knowing beforehand that it was the opening of the consultations of a number of very learned men; but he wanted to ascertain the special benefit that it would be to these communities, and he gathered from the latter part of Mr. Fitzgerald's address that the great benefit would be promoting a number of athletic out-door sports, which would result in the multiplicity of broken limbs—(laughter)—relieved occasionally by a heroic death from the effects of football. (Laughter.) But he had no doubt that that great assemblage of learned doctors would result in great good to the cause of science, and, if so, as a consequence, great good to our common humanity. (Hear, hear.) He happened to be one of those who had learned as one of the sums of his experience that several of the greatest men in all acts of practical benevolence and in all acts that tend to promote the progress of the world had been enlightened physicians. (Hear, hear.) Certainly there were no sphere of human action which opened grander avenues of usefulness than that of the physician, and to the honour of the profession there have been no greater men—no more benevolent benefactors than many men who have honoured that most honourable profession. (Applause.)

MR. PEARSON, the Minister of Education, in responding to the toast of "Her Majesty's Ministers in Victoria," expressed his opinion that some years hence when it fell to the lot of the Mayor of Melbourne, at that time to propose the health of Her Majesty's Ministers in Victoria, the toast might be replied to by a Minister of Public Health.

THE MAYOR, in proposing "The Intercolonial Medical Congress," expressed the pleasure which it had given him to be present at the inaugural ceremony. It was only right that an assemblage of highly-talented gentlemen who represented a most important profession should receive a hearty welcome, and he had no doubt that they would be properly entertained by the citizens during their stay. The congress had assembled for the purpose of discussing matters of the gravest importance to the whole of Australasia, and he had no doubt that the result of the deliberations would be highly satisfactory.

MR. T. N. FITZGERALD, the president of the congress, responded. He pointed out that the congress was for the common good of suffering people and the advancement of a great and noble profession. The fact that most of the members attended the session at great personal inconvenience and pecuniary loss showed that they were earnest in the progress of medical science. Gentlemen coming together in such a manner would impart a great deal of valuable information, and the result ought to be something worthy of the profession. (Applause.)

PROFESSOR ALLEN also responded. He thanked the local secretaries of the other colonies and the secretaries of sections for the assistance they had given to him in the preparations for the congress. For the future he thought that there would have to be a permanent congress staff. (Applause.)

The toast was also responded to by Dr. Morgan (Newcastle), Dr. Whittell (Adelaide), Dr. Closs (Invercargill), Dr. Bright (Hobart), Dr. Elliott (Western Australia), Dr. Rendle (Brisbane), and Dr. Kirtikar (Bombay).

#### EVENING SITTING.

The congress met at the Freemasons'-hall, Collins-street east, in the evening. There was a large attendance of members, and among the visitors was His

Excellency the Governor. The president (Mr. T. N. Fitzgerald) occupied the chair.

THE HON. DR. W. F. TAYLOR (Brisbane), president of the section of medicine, delivered an address, in which he pointed out that the science of medicine included every other science in its limits.

PROFESSOR ANDERSON STUART, M.D., Dean of the Faculty of Medicine in the Sydney University, and President of the Section on Anatomy and Physiology, delivered a practical address on these two subjects, which was received with applause, and which we shall publish in full in an early issue.

Votes of thanks having been given to the lecturers, the congress adjourned until the following day.

#### SECOND DAY.

TUESDAY, JANUARY 8.

At half-past 10 o'clock a large number of members met in the Medical School, where Dr. Maudsley exhibited gynaecological specimens, which were examined with great interest. At half-past 11 a general meeting of congress was held in the Wilson-hall; the President (Mr. T. N. Fitzgerald) in the chair. There was a large attendance.

#### ADDRESS ON SURGERY.

Dr. E. C. STIRLING (hon. surgeon to the Adelaide Hospital, and lecturer on physiology and on clinical surgery in the University of Adelaide) read a paper on surgery. Surgery, he said, was no longer merely an art; it had become a science—(hear, hear)—but while as an art the craft was within a measurable distance of finality, as a science it was only in a healthy and vigorous infancy, but afforded abundant hopes of a splendid maturity. As an art, surgery, as well as medicine, long remained a calling apart; but, as a science, its progress soon became inseparably connected with that of physiology or biology. In times past there had been too much truth in the observation of that scorner of physic who compared nature and disease to two men fighting, and the doctor to a blind man with a club, who, striking in, sometimes hit the diseases and sometimes hit nature. But there were signs of great improvement, and the dawn of better days for pharmacology and therapeutics. There was a degree of precision in their application, of accuracy in the effects produced, and an encouraging approach to knowledge of physiological action of a precise kind, undreamt of not long ago. Collective investigation in Australia of facts bearing on hereditary influence and its laws might be turned to the best account to supplement similar labours elsewhere. Never was there a more devoted and enthusiastic band of labourers in the field; never, by training and education, were these better fitted for the great work before them; never was that work more penetrated by the scientific spirit of the age, of which the watchwords were observation, experiment, deduction, and verification. Modern surgery had accomplished remarkable achievements in the surgery of the brain and spinal cord. Based upon a large variety of facts, drawn partly from accurate pathological observations, partly upon a series of oft-repeated experiments of the biological laboratory, certain deductions were drawn which enabled the surgeon to calculate with a truly scientific precision the locality of certain lesions. The accuracy of his anatomical knowledge, which perhaps more nearly than any other of the biological sciences represented an approach to ideal science, enabled him to define, with still greater accuracy, regions of the

brain or cord which corresponded to the seat of the anticipated disorder. Whatever might be the real truth lying at the bottom of the theories of germs and putrefaction, there was, at least, no doubt that, in the aggregate, the adoption of modern methods had enabled these, amongst other dangerous regions of the body, to be explored and attacked with a minimum of risk of the ordinary surgical calamities and the maximum of hopeful prospect of recovery. It would be well for surgery if it could be shown that, instead of being a mere handicraft depending on tradition and on the application of rule-of-thumb-like methods, it might be reckoned as a member of the great hierarchy of science. It was impossible, however, not to contrast the great possibilities for the improvement of surgery as a science that would be suggested by a better knowledge of fundamental biological and pathological laws, with the more circumscribed sphere of action offered by the expectation of increasing the range of operations. Surgery was within a measurable distance of absolute finality in the scope of its operations. As far as anatomical and physiological possibilities were concerned, surgeons must have nearly reached the limits of their art. New worlds there doubtless were to conquer in the realms of surgery, but these could scarcely be found in the as yet untouched portions of the human frame. A very wealth of ingenuity had been expended in devising new instruments, new splints, new germicides, new ligatures, and new dressings without number. All along the line there had been, no doubt, great and manifest improvement in the technique of surgery, but there had been much also that was simply change, begotten of the restless spirit of the age, and they should be careful to remember that change was not always progress. (Hear, hear.) If surgery was to be placed on a sound footing, there must be a close connection between the practical and scientific, neglect of the latter being fatal to improvement. They must repress the tendency to subordinate principles to practice. Bearing that in mind they might look with hopeful confidence to the effect of their medical schools. He could not refrain from offering a tribute of admiration to the success which had followed the zealous and energetic efforts of their Victorian hosts, who, being first in the field, had been closely followed by their common friends in Sydney, and, still more recently, Adelaide had endeavoured to follow, not unworthily, in their steps. (Applause.) To those who only saw hopelessness in the chance of a successful medical career for a large proportion of students, he would answer—"It may be that the struggle for existence in our own profession is as severe as in others; all cannot succeed in it, and many will be disappointed, but there is this immense countervailing advantage, namely, that no training can be suggested which offer as better or even so good a training of the mind, such a technical education, in the best sense of the term, of eye, ear, hand, and muscles—in short, such an all-round equipment both of suggestive and useful knowledge, and of the means and methods of acquiring more of it than does the curriculum of our own profession. Surely, as a means of education alone, a medical training is worth a great deal, not to speak of the intrinsic value of the facts acquired, or of their usefulness and adaptability in all climes and countries." Medical men in far Australia laboured under the great and manifest disadvantages of being widely separated from the active centres of intellectual life of the older countries, and were deprived of the magnetic personal influence of the master minds of the age, but their very isolation was not without certain advantages of its own. Tradition and ancient usage did not bear upon them with so heavy a

hand. The perspective afforded by their distant point of view brought into prominence, in sharp outline in the foreground, much of that which was best, and enabled them to discern and discard, perhaps more quickly than some of these who were nearer to their origin, doctrines and practices that were reaching the vanishing point. Of practical enterprise, as becomes a young and vigorous race, there was no lack; but they had to take care in seeking to build up a school of Australian surgery to keep before their eyes those solid pillars of their craft—accurate knowledge, infinite painstaking, and the sacred reverence for human life that constitute the splendid conditions and still guiding principles of British surgery. (Applause.) Let them study the science of life and of disease while they practice the art of healing. There and there alone lay the promise of a progress unbroken, and limited only by the bounds which were set to the human understanding. (Applause.)

#### OBSTETRICS AND GYNÆCOLOGY.

Dr. BATCHELOR (Dunedin) gave an address on obstetrics and gynecology. He said that improved methods of examination had brought about a marked development in this branch of surgery, but condemned, as worse than quackery, the frequent unnecessary operations which were made by a certain class of practitioners.

Cordial votes of thanks were tendered to Dr. Batchelor and Dr. Stirling for their contributions.

The congress then adjourned for luncheon.

#### SECTIONAL MEETINGS.

In the afternoon sectional meetings were held for the reading and discussion of the following papers:—

Dipsomania—its Etiology and Treatment, by Dr. P. Smith (Dunwich, Qd.); Race and Insanity in New South Wales, by Dr. Chisholm Ross (Gladsville); Sporadic Cretinism, by Dr. F. Manning; Cases of Cretinism, by Dr. E. C. Stirling (Adelaide); Diphtheria, by Dr. Jas. Jamieson (Melbourne); Diphtheria, by Dr. Jarvie Hood (Maclean, N.S.W.); Unqualified Medical Practitioners, by Dr. W. L. Mullen; Is Cholera Quarantine Scientifically Sanctioned? by Dr. Kirstikar (Bombay); The Necessity of the Medical Inspection of Foreign-going Ships, by Dr. A. E. Salter (Thursday Island); Mr. W. M. Hamlet (Government analyst of New South Wales) furnished a paper on The Efficacy of M. Pasteur's Vaccine in the Cumberland Disease (Australian Anthrax), while Dr. J. T. Mitchell (Port Adelaide) urged in another paper that the medical practitioner should be an officer of the state. Surgery: At the sectional meeting devoted to surgery the following papers were taken as read—Treatment of Tropical Abscess by Incision, Dr. J. Davies Thomas; Resection of Intestine, Ribs, Jaw, &c., by New Methods, Mr. H. W. Maunsell; Excision of Astragalus for Injury, Mr. H. C. Garde; Critical Review of Results of Excision of Hard Chancre, Dr. M. Crivelli; Tetanus Following Dislocation of Semi-lunar Cartilage of Knee, Mr. H. Pollen; (a) Tetanus Operation and Recovery, (b) Phimosia and Adherent Prepuce, Mr. G. T. Woolley; Plaster of Paris in Fracture of Patella, Mr. H. A. Ellis.—Dr. P. SYDNEY JONES (Sydney) read a paper on the operation of Laparotomy, dealing with some of the injuries and diseases which may render the operation necessary.—Mr. R. B. Duncan (Kyneton) contributed a paper on Antiseptic Surgery.—Obstetrics and Gynecology: The following papers were read in this section—Ovarian Disease Complicating Pregnancy, with illustrative cases, Dr. T. Rowan; Fifty Cases of Abdominal Section, Dr. F. C. Batchelor; Two Cases of Extra-uterine Pregnancy Successfully Treated

by Abdominal Section, Dr. R. Worrall; Conditions Warranting Removal of the Ovaries and Tubes, Dr. W. Balls-Headley.

Several papers were read in the section of medicine and the section of pharmacology; while those in the section of pathology were taken as read, and will be included in the Congress Transactions.

#### THE PRESIDENT'S DINNER.

In the evening the president of the congress (Mr. T. N. Fitzgerald) entertained the members at dinner at the Melbourne Town-hall. The members and other guests completely filled the hall. The president occupied the chair, and among those who sat on either side of him were:—His Excellency the Governor, the Premier (Mr. Gillies), the President of the Legislative Council (Sir James MacBain), the Speaker of the Legislative Assembly (Mr. M. H. Davies), the Mayor of the city (Alderman B. Benjamin), the Minister of Public Instruction (Mr. Pearson), the Commissioner of Public Works (Mr. Nimmo), the Chancellor of the University (Dr. Brownless), Mr. Justice Wrensfordsley, and Colonel Sargood, M.L.C.

The toast of "Her Majesty the Queen" having been duly honoured,

The PRESIDENT proposed "His Excellency the Governor." He remarked that His Excellency was always associated with everything good and charitable, and was ever ready to lend his support to anything of a professional or scientific character. The success which had attended the opening of the congress was in no small measure due to His Excellency's influence and to the great interest he had taken in the congress.

His Excellency the GOVERNOR, in responding to the toast, said that he took a deep interest in the congress, as he was of opinion that it would prove of immense benefit to this colony and to Australasia. He trusted that the visiting members would thoroughly enjoy themselves while performing the important duties which had brought them together. (Applause.) Amongst the various papers that would be read at the congress, and the discussions which would take place, there were none which would interest the people of this colony more than those on the subject of sanitation. (Applause.) In the papers which he had heard read the previous evening, reference was made to the death-rate in England and the death-rate in these colonies. There must be some cause for the death-rate amongst children in the Australian colonies being so much in excess of that at home, and it behoved the medical gentlemen who were now assembled in congress to inquire into the nature of these causes. We were very apt in Australia to be seized with alarm at the bare prospect of cholera being imported here, and yet we were most neglectful in providing against typhoid fever—a disease which was carrying off thousands of the population. (Applause.) The Minister of Public Instruction had at the Mayor's luncheon referred to the apathy of the public with regard to the steps which it was requisite should be taken to guard against typhoid fever. He cordially agreed with the expression of opinion that had fallen from the Minister on that occasion. (Applause.) It was wonderful that there should be such an apathetic state of feeling amongst the people of this country on the subject of health. It was that apathy which prevented the necessary steps being taken to guard against the fell disease which was decimating the population. He earnestly trusted that the result of the conference would be to awaken public opinion upon this important matter, and that something definite would be done towards improving the sanitary condition of the

colony, and of Melbourne especially. (Applause.) The subject he had touched upon was not a political one, and therefore he had felt himself justified in referring to it. (Applause.)

The PREMIER (Mr. Gillies) proposed "The Inter-colonial Medical Congress of Australasia." The toast was not merely a personal one, as it involved the success of the mission of the members. That mission was a noble one, as it aimed at relieving human suffering. The medical profession was one of the grandest under heaven, for it had probably done more good for humanity than any other. (Applause.) The study necessary to make men cognisant with all the known facts of medical science was a lifelong one, and members of the profession had often to undergo hardship and suffering to enable them to alleviate the sufferings of patients. (Applause.) The congress was for the purpose of obtaining the best possible information, and as its object was a search after truths, it was bound to succeed. (Applause.)

The PRESIDENT, in responding, said that there were over 550 members in the congress, and the success of the gathering was already assured. (Applause.) The members were deeply indebted to the Government—and to Mr. Gillies personally—for the assistance and encouragement they had received from the State. (Applause.)

The CHANCELLOR of the UNIVERSITY OF MELBOURNE (Dr. Brownless), proposed "Visiting Members of the Congress," and referred to the progress which had been made by the medical profession in the colonies.

The toast was responded to by Dr. Kirtikar (India), Dr. Sydney Jones (New South Wales), Dr. D. Colquhoun (New Zealand), Dr. Scholes (Queensland), Dr. Gardner (South Australia), Dr. Bright (Tasmania), and Dr. Elliott (Western Australia).

The proceedings then terminated.

#### THIRD DAY.

WEDNESDAY, JANUARY 9.

In the morning a number of the members paid a visit to the Melbourne Hospital, and were shown special cases in the wards. The members interested in the section of psychological medicine inspected Yarra Bend Asylum, while others attended the demonstrations at the University, where Professor Allen gave a demonstration of hydatid cysts before a large number of members, who evinced great interest in the specimens, which were pronounced to be the finest collection in the world.

#### HYDATID DISEASE.

A general meeting of congress was held at 11 o'clock in the Wilson-hall for the discussion of hydatid disease. There was a numerous attendance. Dr. E. C. Stirling (Adelaide) presided.

The CHAIRMAN spoke of the importance of the subject of hydatid disease in Australia, and said that, in the absence of the contributors, the following papers would be taken as read, and included in the transactions of the congress:—"The Geographical Distribution of Hydatid Disease," and "Age and Sex in Relation to Hydatid Disease," by Dr. J. Davies Thomas (Adelaide); "Natural History of Hydatids in Various Organs," by Professor Allen (Melbourne University); "Hydatid Disease in New Zealand," by Dr. R. Gordon McDonald (Dunedin); and Hydatid Disease from the English Standpoint," by Dr. R. H. Martin.

Dr. W. GARDNER (Adelaide) read a paper on "The Surgical Treatment of Hydatids," dividing the subject

into three parts, the first describing all the various surgical methods employed in the treatment of hydatids, the second consisting of statistics showing the results of the various methods of treatment, and the third explaining his own views and methods, and the results he had obtained during the last four years.

Dr. J. C. VERCO (Adelaide) read a paper on a case of removal of a hydatid cyst from the brain of a child in the local hospital. The patient died four days after the operation of cerebral meningitis, but the post-mortem examination showed that death was not caused by the surgical operation.

Dr. J. DAVIES THOMAS (Adelaide) read a paper on "The Operative Treatment of Echinococcus Cysts."

In a discussion which followed, Dr. Sydney Jones said hydatid disease was less frequent in New South Wales than in South Australia. Dr. Scott, of Warrnambool, said that along the Wannon and the Glenelg one-third of the people had hydatids. Dr. W. Gardner, Dr. J. Davies Thomas, and other South Australian practitioners advocated radical treatment, viz., incision and the entire removal of the hydatid cysts; while Mr. T. N. Fitzgerald, the president of the congress, who related cases extending over an experience of nearly 30 years in the colony, Dr. Bird, sen., and other Victorian practitioners were of opinion that in the great majority of cases simple tapping was equally efficacious and practically unattended with danger.

The CHAIRMAN said that although the general opinion expressed in the course of the discussion was unfavourable to the opinion of the Adelaide school, the objections were not supported by statistics, although one was bound to respect the views of gentlemen of large experience.

The congress then adjourned for luncheon.

After luncheon the sectional meetings were held.

Dr. W. ARMSTRONG, late superintendent of the Hospital for the Insane, Ararat, read a paper in the psychological section on "Lunacy Legislation in the Australian colonies."

Mr. W. L. CLELAND, M.B., resident officer at the Parkside Lunatic Asylum, S.A., read a paper on "Australian Lunatic Asylums: Their Economic Management in the future."

THE HON. J. M. CREED read a paper on "Leprosy in relation to the European population in Australasia." He said in conclusion: "I submit we may fairly assume:—

"1st. That the disease is contagious, but only under circumstances extremely favourable to its propagation, which lower the vital powers of the persons exposed to it; and that there is no real danger to a people who live with good sanitary surroundings, have a fitting, wholesome diet, and are personally clean, however intimate their association with lepers are.

"2nd. That the disease may be hereditary, but frequently skips generations, and becomes less severe as the descent becomes remote.

"3rd. That the presence of constitutional syphilis increases the liability to the disease.

"4th. That though very intractable, it is not incurable, and that there are occasionally instances of spontaneous cure.

"5th. That there are other diseases much more dangerous to life and health rife in these Colonies, and that there is no just reason for the unreasoning dread and horror in which leprosy is held by the majority of the people."

Dr. MILFORD (Sydney) said that five cases, all being of European parentage, were some years since reported from the bush country, the disease being attributed to bad food and unhealthy surroundings.

Dr. JAKINS (Melbourne) said in Bombay the Government had built a special sanatorium for lepers, and from 30 to 40 per cent. were cured.

Dr. J. CARNEGIE McMULLEN read a paper on the colonies as a health resort. He complained that incurable cases were sent to the colonies, and no directions were given to patients as to what part of Australia they ought to visit. A discussion followed, in which the various speakers made similar complaints.

Dr. MILFORD (Sydney) read a paper on the baneful influence of winter westerly winds on disease in New South Wales. Westerly winds were so depressing to patients that he would not operate while they prevailed.

Dr. HUDSON read a paper on the climate of Nelson, New Zealand, which he said was good for patients suffering from phthisis, and for people who had resided in the tropics.

Dr. TURNER (Melbourne) read a paper in condemnation of the evils of specialism, which tended, in his opinion, to contract the mind.

Papers on "Some Victorian Factory Statistics" by Dr. J. W. Springthorpe (Melbourne), and "Influence of Climate on Phthisis," were taken as read.

PROFESSOR ANDERSON STUART (Sydney) read a paper on "The nature of dependence from the throat of the bell pig," and exhibited a dissection of a dependence. He had seen similar excrescences in goats.

A number of demonstrations of physiological apparatus were made by Professor Anderson Stuart in the presence of the Governor and a large gathering of members of the congress, the apparatus including a new form of electrical time-marker, which would record periods from half-a-second to one five-hundredth of a second. He also exhibited models of the eye and various organs of the body, specimens of skeletons, and the bones of animals preserved by the gelatine and glycerine method.

At the meeting of the section of obstetrics and gynaecology an interesting paper was read by Dr. J. C. Verco (Adelaide), on the subject, "Should a medical man practise midwifery while in charge of a case of puerperal fever." He said that during the last 1½ years he had attended 1255 cases of this class, and among these there had only been four deaths from puerperal fever. In none of the cases of fever had the disease been communicated through him, but it had arisen from separate and distinct causes. He therefore thought that the doctor might without fear practise generally although he had a case of fever. The conclusion at which he had arrived was this—A medical man should recognise the special susceptibility of the patient in these cases to the pernicious influence of all animal poisons, and should, therefore, in every midwifery case exercise care, lest these gained entrance to her system, by adopting simple routine protective measures. Whenever he had under his charge a case of infectious or contagious disease, whether this be medical, surgical, or obstetrical, he should regard himself as a possible vehicle of transmission or contamination, and he should consequently use extra care in the employment of precautionary measures. But if, in his midwifery cases, a succession of two or more cases of puerperal poison occurred, between which he was certainly or probably the connecting link, obstetrical practice should be instantly and wholly abandoned.

The view set forth by Dr. Verco was generally supported in the discussion which followed the reading of his paper.

Dr. W. S. FLETT read a paper on "Anæsthetics in Obstetrics."

In the section of surgery the following papers were contributed:—"Cystotomy," Dr. A. McCormick; "Supra-pubic Lithotomy," Mr. J. Tremearne, Mr. H. M. O'Hara, and Dr. L. Robinson; "Drilling in Otitis and Joint Disease," the President (Mr. T. N. Fitzgerald); "Thyroidectomy," Mr. H. W. Maunsell; "Diffuse Suppurative Periostitis terminating in Recovery, without Necrosis," Dr. J. O. Verco; "Dilatation of the Pylorus," Dr. W. Gardner; "Special Exercises and Active and Passive Movements as an aid to Surgical Treatment," Mr. R. E. Roth; "Notes on Lateral Curvature of the Spine," Mr. G. A. Scott.

The following papers were read in the section of Diseases of the Eye, Ear, and Throat:—"On Convergence," by Dr. M. J. Symons; "A Series of Cases of Resection of the Optic and Ciliary Nerves," by Mr. H. Lindo Ferguson; "Sandy Blight and Granular Ophthalmia," by Mr. T. Aubrey Bowen; "Granular Conjunctivitis," by Mr. R. B. Duncan; "A Case of Sarcoma of the Eyelids," by Dr. W. Odillo Maher; "Remarks on Ophthalmic Work in Western Australia," by Dr. J. W. Hope; "Ocular Symptoms due to Diseases of the Nasal Cavities," by Dr. T. K. Hamilton; "The Treatment of Chronic Catarrh of the Middle Ear," by Dr. J. W. Barrett; "A Case of Cerebellar Abscess" (with specimen), "Aspergillus Niger," and an exhibit of instruments, by Mr. H. Lindo Ferguson.

Several interesting papers were also read in the sections of Medicine, Pathology, and Diseases of the Skin.

In the evening His Excellency the Governor and Lady Loch entertained the members of the Intercolonial Medical Congress at Government House. The company numbered upwards of 1,000 ladies and gentlemen, including, besides members of the congress, many leading citizens and other guests. All the state-rooms were thrown open for the use of the guests who were welcomed at the upper end of the ball-room by His Excellency and Lady Loch. One half of the ball-room was devoted to dancing, in which a large number of the party engaged, to music supplied by Herr Plock's band. Refreshments were served in the supper-room. The proceedings were brought to a close shortly after midnight.

#### FOURTH DAY.

THURSDAY, JANUARY 10.

In the morning visits were paid to the various public hospitals, for the purpose of inspecting the institutions, examining special cases, and witnessing operations. Demonstrations of medical specimens were conducted by Professor Allen and Dr. Maudslayi in the museum at the new medical school. At half-past 11 a.m., a general meeting was held in the Wilson-hall, Mr. T. N. Fitzgerald, president of the congress in the chair.

Dr. H. N. MacLAURIN, president of the Board of Health, of New South Wales, read a paper entitled: "A Comparative View of the Mortality of the Different Colonies from Certain Diseases,"—which we shall publish in full in a future issue of the *A. M. GAZETTE*.

Dr. NEILD proposed a vote of thanks to Dr. MacLaurin for his paper. With reference to the suggestion made that there should be compulsory notification and registration of infectious diseases, he pointed out that families which were afflicted would have some delicacy in giving full particulars. The desired object of registration might therefore be sufficiently secured by medical men furnishing annual returns, simply giving the total number of cases of infectious diseases which came under their notice.

The motion was carried by acclamation.

Dr. W. CAMAC WILKINSON contributed a paper on pathology, in the course of which he expressed the opinion that the economic success of M. Pasteur's system of inoculation had not yet been proved.

The congress then adjourned for luncheon.

In the afternoon meetings of the various sections were held for the reading and discussion of a large number of papers on a variety of subjects.

Among the papers read at the sectional meetings was one by Dr. SPRINGTHORPE (Melbourne) on "Hygienic Conditions in Victoria," and another by Mr. W. BEATTIE SMITH (Ararat) on "Housing of the Insane."

In the section of Psychological Medicine, a paper was received from Dr. ERIC SINCLAIR (Gladesville) on "The Extension of Hospital Methods to Asylum Practice."

A paper by Mr. W. H. MACFARLANE, on "The Treatment of Well-to-do Insane on the Cottage Principle," was taken as read."

Dr. W. O. WILLIAMSON read a paper on "The Training of Asylum Attendants and Nurses."

The President of the Congress (Mr. T. N. Fitzgerald), in the section of surgery, contributed an interesting paper on "New Operations for Club Foot and other Deformities," in explanation of which he exhibited subjects who had been operated upon with success.

In the section devoted to diseases in children, Mr. W. SNOWBALL gave an address on intestinal troubles in children, which were generally attributed in the course of the discussion to bad ventilation, improper feeding, and climatic influences.

In the Gynæcological section a very interesting paper was read by Dr. THOMAS CHAMBERS (of Sydney) on "A case of Uterine Gestation Supervening on a Case of Ectopic Gestation of Four Years' Duration." The case presented perfectly unique surroundings.

Dr. FELIX MEYER read a paper on "The Obligations of Gynæcology to Obstetrics."

The comparatively new addition to gynæcology introduced by Professor Apostoli, was dealt with in a paper by Dr. FOREMAN (of Sydney) entitled "Electrolysis in Diseases of Women," which brought to a close a most interesting afternoon, not only in the subject matter, but from the diversity of opinion evolved in the discussion which followed. By the majority of those who spoke, it was decided that this important innovation in treatment was yet on its trial, but it is only right to mention that it found an able and eloquent champion in the president of the section, Dr. Batchelor (of Dundee).

The following papers were taken as read:—"Sore Throat and Uterine Disease," W. M. Stenhouse, M.D., Ch.M.; "Rotation of the Pedicle in Ovarian Disease, (two cases)," W. Gardner, M.D., Ch.M.; "Anæsthetics in Obstetrics," S. Maberly Smith, M.R.C.S.; "Cervical Catarrh," M. U. O'Sullivan, L.R.C.P. et S.; "A Modification of Marion Sims's Operation of Metrotomy," G. R. Adam, M.B., Ch.M.; "Five Cases of Lawson Tait's Operation for Tubal Disease," H. W. Maunsell, M.B., M.R.C.S.

#### THE SPEAKER'S DINNER.

In the evening the Speaker of the Legislative Assembly, Mr. M. H. Davies, gave a dinner to members of the congress at the Melbourne Town Hall. About 500 gentlemen were present. The dinner was served in excellent style.

The loyal toasts having been duly honoured,



The **SPEAKER** proposed "Success to the Intercolonial Medical Congress," and dwelt upon the advantages which accrued from the interchange of opinions among professional men. The president of the congress, in acknowledging the toast, said that the present organisation was the first real attempt to federate the medical profession of Australasia. Professor Allen, the secretary of the congress, also responded, and advocated the appointment of a permanent commission of health in preference to a Health Minister changing with each administration. Mr. Pearson, the Minister of Public Instruction, in proposing the toast of the visitors, highly eulogised the medical profession, and extended a hearty welcome to the visitors from the other colonies. Professor Anderson Stuart and Dr. Verco acknowledged the toast. The health of the host having been honoured at the call of Dr. J. Davies Thomas, the proceedings terminated.

#### FIFTH DAY.

FRIDAY, JANUARY 11TH.

After visits had been paid to the hospitals, and a demonstration of surgical specimens had been made in the Wilson-hall, where the general meeting was held, Dr. F. N. Manning, inspector-general of the insane in New South Wales, and lecturer on psychological medicine at the Sydney University, read an exhaustive paper on "Lunacy in the Australian Colonies," which we publish in full on page 83.

After a paper on "Specialism" had been read by Dr. W. J. Symons, of Adelaide, the congress adjourned for lunch.

On resuming, Dr. James Robertson read a paper on "The History of Typhoid in Victoria, and its Etiology." Typhoid was endemic in the colonies. His opinion was that it had been imported from British ports, and became endemic at a very early period. Typhoid was contagious, but not in the same way or to the same extent as typhus, smallpox, measles, and scarlatina. Delicate persons were not so liable to attack as the apparently vigorous. One attack, as a rule, gave immunity from subsequent attacks.

Dr. J. G. CARSTAIRS (Geelong) contributed a paper on "The Etiology of Typhoid."

Mr. A. V. HENDERSON read a paper in which he gave the history of an outbreak of fever at Lilydale.

Other papers bearing on the same subject were the following:—"Variations in the Pathological Process," by Professor Allen; "Notes on the Incubation Period," by Dr. J. C. Verco; "The Cold Bath Treatment," by Dr. F. W. E. Hare (Brisbane); "Antifebrin in Typhoid," by Dr. W. Pierce; "Treatment of Typhoid," by Dr. J. Singleton.

After an interesting discussion, in which Professor Allen, Dr. Whittell (Adelaide), Dr. T. S. Ralph (Melbourne), Dr. Jamieson (health officer at Melbourne), Dr. Hacon (Christchurch), Dr. Springthorpe, Dr. Kirtikar (India), Dr. Astles (Melbourne), Dr. Newman (Geelong), Dr. Ellis (Sydney), and Dr. Bright (Hobart) joined, the following motion of Dr. VERCO (of Adelaide), seconded by Dr. COLQUHOUN (Dunedin), was unanimously agreed to:—

"That the members of the Intercolonial Medical Congress regard it as proved that typhoid fever is a preventable disease, which owes its prevalence mainly to insanitary conditions, and above all to contaminated water supply, defective drainage, and improper disposal of nightsoil."

The following motion was also carried, on the proposition of Dr. TURNER, seconded by Dr. J. DAVIES THOMAS:—

"That while there is reason to believe that the source of water supply of Melbourne is carefully guarded, it is certain that as regards drainage and night-soil disposal the arrangements are very unsatisfactory, and that to these defects must be ascribed in a great measure the excessive prevalence of typhoid fever year after year."

On the motion of Mr. E. M. JAMES, seconded by Dr. BRIGHT, the congress unanimously agreed:—

"That in the opinion of the congress it is the imperative duty of the Government to take immediate steps for bringing about an improvement of the sanitary condition of Melbourne, specifically for the construction of a proper system of underground drainage, which shall include the removal of nightsoil by water carriage."

#### DINNER AND CONCERT AT THE EXHIBITION.

In the evening a complimentary dinner was given at the Exhibition-building by Dr. Balls-Headley, the president of the Medical Society of Victoria, to the members of the Intercolonial Medical Congress. An excellent *menu* was provided by Mr. H. Skinner, the caterer.

After the usual loyal toast had been honoured, The **CHAIRMAN**, Dr. Balls-Headley, proposed the toast of "The Visitors." There were many points, he said, in which the proceedings of the Medical Congress must be of the greatest advantage to the community, and amongst the first was the fact that conclusions had been arrived at upon many important subjects. The principles of medical science had been proved to be practically identical in the various colonies, and when people went from one medical man to another they found that they got treatment which might differ in detail, but did not vary in principle. The consideration which had been given to sanitary questions was also to be noted. Sanitation, or rather insanitation, was the cause of the death of an enormous number of the people of this country, and he was sure that members of the Government would appreciate that fact, and assist the medical profession in attempting to supply a remedy. The opportunities for intercourse between members of the profession from all parts of the colonies were also an important advantage which had been furnished by the congress. He cordially drank to the health of all the visitors.

Dr. MORGAN, of Newcastle, in responding, thanked the Melbourne representatives for the hospitality which had been accorded to the visitors. He trusted that the congress would take the hints which had been given by the Minister of Education, Mr. Pearson, M.L.A., and try to place itself in communication with the various Governments in matters belonging to the sanitation of the various colonies. There was no question that sanitation was not regarded as it ought to be. In New South Wales there was no Health Act whatever, and the medical profession in that colony had not got the ear of the Parliament. He considered that such a representative meeting as that congress had been should obtain the sympathy and co-operation of Parliament. He conveyed the thanks of the colony of New South Wales and of the visitors generally to Dr. Balls-Headley and the people of Victoria for the hospitality which they had shown towards them.

After Dr. McCormick had briefly proposed the health of the chairman, and the chairman had suitably replied, the guests proceeded to the concert-room, to attend the complimentary concert given to the members of the congress by the president and executive committee of the Exhibition. Sir James MacBain and others represented the hosts, and Mr. Cowen and the musical artists under his control did their best to make the musical evening pleasant to the guests.



## SIXTH AND LAST DAY.

SATURDAY, JANUARY 12.

In the morning, at a quarter to ten, Professor Anderson Stuart, of the Sydney University, demonstrated a new membrane in the eye which had not yet been described by any authority, and he also showed a new mode of demonstrating the structure of the eye.

At ten o'clock the final meeting of the Intercolonial Medical Congress was held in the Wilson Hall, under the presidency of Mr. T. N. Fitzgerald. Baron von Mueller, president of the section on pharmacology, delivered a lengthy and interesting address on that subject, in which he detailed the discoveries already made in Australia, and urged the necessity of a systematic and thorough examination of the flora of this continent for medicinal purposes. He concluded with a strong recommendation that the leading universities of the world should be invited to send representatives to the next session of the congress, and the suggestion is to receive the consideration which its importance deserves.

A hearty vote of thanks was accorded to Baron von Mueller on the motion of Dr. Neild (Melbourne), seconded by Dr. Dixon (Sydney).

## SPECIAL MEETING.

A special meeting of congress was then held to determine the time and place for holding the next (third) session, and to elect a new president. Mr. T. N. Fitzgerald, president, occupied the chair.

Dr. PHILIP SYDNEY JONES (Sydney), said he had the honour to submit, for the consideration of the congress, a motion which he felt confident would receive the most hearty support, and an invitation which he hoped would be accepted with the same cordiality with which it was given. (Applause.) The motion was as follows:—

"That the third session of the Intercolonial Medical Congress be held in Sydney in the year 1892, or at some such earlier period as the medical societies of New South Wales may think fit to determine upon." (Applause.) It was not the desire of the Sydney representatives present to bring about the holding of the next session of congress in 12 months from the present time, but it might possibly be found more convenient to meet at the end of the year 1891, or to hold the congress at a pleasanter season of the year, as the summer heat in Sydney was very trying. (Hear, hear.) For these reasons it was desirable to leave the matter in the hands of the medical profession of New South Wales, who were anxious that the Sydney meeting of the congress should conduce not only to the edification of the minds of the visiting members of the profession, but also to the invigoration of their bodies. (Laughter and applause.) The medical men of New South Wales could not hope to surpass their friends in South Australia or Victoria, either in the perfection of the arrangements for the congress, or in the sumptuousness of their hospitality—(applause)—but they certainly tendered to the congress a most cordial invitation, and would do their best to make the Sydney meeting a thorough success. (Applause.)

Dr. KNAGGS (Sydney) seconded the motion.

The GENERAL SECRETARY (Professor Allen) said he had received from Dr. Dawson, who represented the Medical Association of New Zealand, an invitation for the congress to meet in that colony as soon as possible; but the New Zealand representatives did not desire that their invitation should interfere with the invitation which had been so graciously given by the representatives of New South Wales. (Applause.)

The motion was then put to the meeting, and carried by acclamation.

Mr. E. M. JAMES (Melbourne) said it was with great pleasure and confidence that he submitted the following motion:—

"That Dr. MacLaurin, the medical adviser of the Government of New South Wales and president of the Central Board of Health, be elected president of the third session of the Intercolonial Medical Congress of Australasia." (Loud applause.)

THE HON. J. M. CREED (Sydney) seconded the motion, remarking that no better choice could be made. Dr. MacLaurin not only held a first place in the profession in New South Wales, but also a first place in the affections of his medical brethren, who would feel that the interests of the Congress would be thoroughly served by that gentleman during his tenure of office.

The motion was carried unanimously, and loud cheers were given for the president-elect.

The PRESIDENT.—It is extremely gratifying to myself to know that you have selected such an able member of the profession as Dr. MacLaurin, and I am sure you could not possibly have chosen a better man for the president. (Applause.)

## PRESENTATION TO THE EX-SECRETARY.

Dr. M. J. SYMONS (Adelaide) requested the president to present to Dr. Poulton, of Adelaide, the originator of the Intercolonial Medical Congress of Australasia and its first general secretary, a handsome silver inkstand and a purse of sovereigns, the gift of his medical brethren in South Australia, in recognition of his services at the first congress, held in Adelaide in 1887.

The PRESIDENT said it was his most pleasing duty to hand the souvenir to Dr. Poulton, to whose great ability, care, judgment, and discretion, as general secretary, the success of the first session of the congress was unquestionably due. (Applause.) He (the president) attended the congress, and could testify from personal experience that Dr. Poulton discharged his onerous duties in a most admirable manner. (Applause.)

Dr. POULTON said it was with very peculiar pleasure that he received that memento of appreciation and goodwill from his professional brethren in South Australia. As a member of the council of the British Medical Association, it fell to his lot to make the first suggestion, he believed, with regard to holding a medical congress in Australasia. (Applause.) But the congress was really not indebted to him; it was he who was indebted to the congress, and he would always remember the kindness of his committee and the untiring energy they displayed in making the first session of the congress a success. (Applause.)

Dr. KIRTIKAR (Bombay) said he had the pleasure to offer for the acceptance of the president (Mr. T. N. Fitzgerald) and the general secretary (Professor Allen) copies of one of the oldest native Indian medical works, in Sanscrit. (Applause.) To the congress generally he desired to present the following lines:—

## A SONNET SOUVENIR.

Ministers of health who, ceaseless, nobly fight  
'Tween life and death, 'tween health, disease and pain,  
Shedding perennial, glorious, radiant light  
Upon Hygiea's world-wide blest domain!

Free from this flow of reason—feast replete—  
Go back to sacred duty. O, but meet again,  
And let me share your wisdom—mine's the gain—  
When in this solemn conclave ye may meet.

Live long, Australian confrères, live and work,  
Not with the lurid eye that loves the gold—  
Live as ye have, the glory of your race,  
To cheer the hearts where pain and anguish lurk.  
Your names will e'er these passing joys enfold,  
And find within my heart a lasting place.

Melbourne, Jan. 12, 1889.

—K. R. KIRTIKAR.

The reading of the sonnet evoked loud applause. The president and general secretary accepted the souvenirs, with thanks to the donor.

#### HEALTH LEGISLATION AND UNQUALIFIED PRACTITIONERS.

DR. SPRINGTHORPE said, that by the instruction of the section of state medicine, he had to submit the following resolution, which he felt sure would be accepted without further recommendation when he mentioned that it had been drafted by Dr. McLaurin, the president elect :—

(1) "That this congress urges upon the notice of the different Governments of Australasia the necessity which exists for fresh legislative enactment in all the colonies, with a view to obviate the grave dangers to public health which everywhere prevail, and which in many cases are due to easily removable causes." (2) "That in the interests of the public, this congress urges upon the various Governments of Australasia the necessity for amendments in the laws relating to the position of medical practitioners, in order that the public may be in a position at all times to protect themselves against the impositions of unqualified persons." (3) "That copies of these resolutions be forwarded by the secretary to the Federal Council, and also to the Governments of the different colonies."

DR. MORGAN (Newcastle) seconded the motion, which was carried unanimously.

#### VOTES OF THANKS.

Hearty votes of thanks were tendered to the president (Mr. T. N. Fitzgerald), to the general secretary (Professor Allen), to the ladies and gentlemen who have entertained the members of the congress, and to the Chancellor and Council of the Melbourne University for the use of the University buildings.

#### ADJOURNMENT.

On the motion of Dr. Verco (Adelaide), the congress adjourned until its next session in Sydney.

#### GARDEN PARTY AT RUPERTSWOOD.

In the afternoon members of the Congress with other guests travelled by special train to Sunbury, and were entertained at a garden party, at Rupertswood, by Sir William and Lady Clarke. The train left Melbourne at 1 o'clock and went as far as the country residence of Sir William and Lady Clarke. The guests, who numbered about 700, were received inside the park-gate by the host and hostess, and were immediately afterwards invited to partake of a sumptuous lunch, which was provided in a spacious marquee. After ample justice had been done to the luncheon, Sir William Clarke called upon the company to honour the toasts of "The Queen" and "The Governor." Sir William explained that his Excellency had intended being present, but was prevented by the death of a relative of a member of his staff. He afterwards proposed "The Intercolonial Medical Congress of Australasia." Mr. T. N. Fitzgerald (the president) responded, and proposed the healths of the host and hostess—a toast which was most cordially acknowledged. Sir William having replied, the company were afforded the opportunity of hearing some excellent open-air madrigal singing, by Mrs. Palmer, Miss Christie Fuller, Mr. C. M. J. Edwards, and Mr. Frank H. Morton, an accomplished and well-balanced quartet of vocalists. The same singers, with Madame Emilia D'Este, afterwards gave in the drawingroom a programme of solo and concerted music, which was much appreciated. The Nordenfelt Battery were present, and went through a tournament in one of the paddocks of the estate for the delectation of the visitors. The

tennis court and bowling-green were open to the use of the guests, and throughout the afternoon the grounds were enlivened by sweet strains of music from Signor Zelman's military band. Notwithstanding the extreme heat of the afternoon, the arrangements made for the entertainment of the guests were such as to render the garden party a complete and most gratifying success. The visitors returned to Melbourne by a special train, which reached the city shortly after 6 o'clock.

On Monday, January 14, the members of the Congress, with their lady friends, were entertained by the Premier, on behalf of the Government, at a luncheon, on board H.M.V.S. Nelson, at Capel Sound. There were 500 present, amongst them being the Governor, Sir Samuel Griffith (of Queensland), and the Premier and members of the Victorian Government. The guests were conveyed to the Nelson by the steamer Courier. At the luncheon the Governor, in responding to his health, expressed satisfaction that the Congress had proved such a great success. He believed the result would be a benefit to the whole world. He proposed "The health of the Medical Congress, coupled with the name of Mr. T. N. Fitzgerald, the president." The Governor also proposed "The health of the Ministry." A very pleasant day was spent. In the evening the Metropolitan Liedertafel entertained the members of the Congress at a smoke concert.

Messrs. Burroughs, Welcome, & Co., exhibited specimens of their preparations at the Congress, during the whole of its progress, and their representative—who was continuously present—was most attentive and polite in giving every information to members.

## THE MONTH.

### NEW SOUTH WALES.

THE draft report of the Intercolonial Rabbit Commission, as prepared by its President, Professor Dr. Allen, deals exhaustively with the work of the chief expert at Rodd Island, near Sydney, and the important results of the various experiments carried out at that station. So far as the experiments have gone, their tendency is to prove that the remedy of M. Pasteur—chicken cholera—is totally inefficacious for the extermination of rabbits under the conditions which prevail in the interior of this continent. The microbes, it is asserted, will lose their virulence after a few hours' exposure on a moderately warm day, or when subjected to the drying effects of wind. The Tintinallody disease is also dealt with at length, the conclusion being that the operations conducted with that outbreak have no scientific value whatever. The disease discovered by Professor Watson, of Adelaide—the *sarcoptes canisui*—is also dealt with, and further investigation is recommended with the bladder worm, which is said to have cleansed the Wairarapa district in New Zealand.

A MEDICAL Superintendent is wanted for the Sydney Hospital; salary, with board and quarters, £500 per annum. Applications, with diplomas and credentials, must be forwarded to the secretary not later than 10 a.m. of Saturday, 2nd February.

THE hospital at Balranald is in an impoverished condition.

138 CASES have been treated during the past year at the Wilcannia Hospital, of which 115 were cured and relieved, 14 died, and 9 remained in the hospital.

CANDIDATES for registration by the Medical Board of N. S. Wales are now required to furnish the Secretary, Dr. Housion, with a copy of their photograph, duly attested by their signature, for future identification, otherwise they will not be able to obtain the certificate of the Board.

DR. W. G. ARMSTRONG, late of Redfern, Sydney, has succeeded to the practice of Dr. B. T. Russell, at Werriwa, 198 miles north of Sydney.

DR. W. C. ASHE, of Kiama, has been appointed coroner for that district and for the colony generally, vice Dr. J. S. Wilson, resigned.

DR. C. C. COCKS has removed from Rochester (Vic.) to Wentworth, on the Darling River, 730 miles south-west of Sydney; Dr. Cocks has been appointed medical officer of the local hospital.

DR. L. FITZPATRICK, late of Queanbeyan, has commenced practice at Holden-street, Ashfield, a suburb of Sydney.

DR. R. VANDELEUR KELLY has commenced practice at Katoomba, in the Blue Mountains, 66 miles west of Sydney.

DR. JAMES MANN, late of Fiji, has commenced practice at Leichhardt, a suburb of Sydney.

DR. B. J. NEWMARCH, late of Bowral, has entered into partnership with Dr. F. H. Kyngdon, of North Shore, near Sydney.

DR. J. L. NEWTON, formerly of Mudgee, and late of South Brisbane, has settled at Denman, on the Hunter River, 165 miles north of Sydney.

DR. A. E. PERKINS has commenced practice at Hurstville, a suburb nine miles from Sydney.

DR. R. J. PIERCE, of West Maitland, is raising a fund for the establishment of a nurses' home in connection with the Maitland hospital.

DR. TARRANT, in consequence of a contemplated visit to America and England, has tendered his resignation of the position he had held on the honorary staff of the Sydney Hospital for the past eight years. The resignation was accepted, and Dr. Tarrant was appointed an honorary consulting surgeon of the institution.

DR. A. E. WOODFORDE, late of Akaroa, N. Z., has settled at 122 William-street, Sydney.

#### QUEENSLAND.

THE following Medical Practitioners have been appointed Magistrates of the Colony, viz.:—H. G. Button, Blackall; S. Candiotis, Clermont; H. Findlay, Townsville; C. Neill, Ipswich; W. D. Thomas, Bundaberg; and W. McGregor, C.M.G., Administrator of British New Guinea.

THE Polynesian hospital near Maryborough has been closed.

SEVENTY-EIGHT cases of typhoid fever were admitted into the Brisbane Hospital during the month of December.

THE death rate is so abnormally high at Croydon that the life insurance companies have instructed their agents to issue no more policies.

We regret to have to announce the death of Mr. William Howlin, J.P., L. et L. Mid., R.C.S., Edin., and L.A.H., Dub., 1874, who died at Dalby, on December 18, aged 36 years. The deceased gentleman arrived in

the colony in the beginning of 1876, when he commenced practice at Toowoomba, where he held the appointment of surgeon to the Toowoomba hospital for some years; he afterwards removed to Dalby, where he resided ever since. At the time of his death Dr. Howlin was surgeon of the Dalby hospital, a surgeon of the Queensland Infantry Volunteers, and Government medical officer for the district.

ON November 23 Dr. Willis, of Barcaldine, in the local Small Debts Court, sued the financial secretary of the Oddfellows' Lodge for £29 8s. for the examination, at 21s. each, of twenty-eight candidates applying for admission to the Lodge. It was stated to be unusual to pay doctors for examining candidates when a new lodge was being formed when he had been promised the position and salary of surgeon to the lodge. After hearing the evidence, the Bench dismissed the case. Dr. Willis gave notice of appeal to the District Court.

DR. C. M. AIRD has commenced practice at Esk, 70 miles south-west of Brisbane.

DR. H. E. N. DOBIE has settled at Kamerunga, in North Queensland.

DR. S. H. EDGELOW has settled at Lutwyche, a suburb 4 miles from Brisbane.

DR. M. E. FITZGERALD, formerly at Springsure, has succeeded to the practice of Drs. Harding and Magill at Thargomindah, 670 miles west of Brisbane.

DR. WALTER B. NISBET has commenced practice at Townsville.

DR. EDWARD TILSTON, of Brisbane, has been appointed a member of the Queensland Medical Board.

#### SOUTH AUSTRALIA.

THE R.M.S. "Oroya," which arrived from London at Adelaide, on January 3, had 29 cases of measles on board since November 29.

AT the annual commemoration of the University of Adelaide, held on December 19, the following medical practitioners were admitted *ad eundem gradum*:—Sylvanus James Magarey, M.D., University of Melbourne; Harry Swift, M.D., University of Cambridge; Christopher Bollen, M.B., University of Toronto; Thomas Borthwick, M.B., University of Edinburgh; Robert Humphrey Marten, M.B., University of Cambridge.

THE Adelaide Hospital Board have rejected a motion in favour of introducing lady members on the board.

THE Board of Management of the Adelaide hospital, at a special meeting, further considered the subject of the appointment of Chairman and Medical Superintendent. Dr. Sprod moved that Dr. Robertson be appointed Chairman. The Acting-Chairman ruled the proposition out of order, and a motion disputing the ruling was negatived. Dr. Way proposed that a committee should make enquiries on the subject at the Medical Congress in Melbourne, and the idea was adopted.

A RESIDENT medical practitioner is much required at Port Germein, a rising seaport in a wheat-growing district, 172 miles north of Adelaide.

DR. A. R. MCMILLAN has settled at Narracoorte, 222 miles south-east of Adelaide.

DR. W. J. MOUNTAIN has removed from Bordertown to Elliston, on Waterloo Bay, 317 miles west of Adelaide.

DR. POWELL, Medical officer of the Mount Gambier hospital, having been called upon by the Government to resign his office, but having declined to do so, has now been dismissed by order of the Executive Council. Dr. John Johnson has been appointed his successor.

#### TASMANIA.

THE statue of the late Dr. Wm. Lodewyk Crowther, which has been erected in Franklyn-square, Hobart, was unveiled on January 10, by the Premier in the presence of a large concourse of citizens. The statue, which was the work of Signor Racci, cost £600, and is an excellent presentment of the deceased.

DRS. C. E. BARNARD and Thos. Gray, both of Hobart, have been appointed Official Visitors of the Hospitals for the Insane at New Norfolk and the Cascades.

DR. R. F. BOWERS, has settled at San Diego Maria Island.

#### VICTORIA.

THE Governor, in the name of the Queen, has assented to the "Inebriate Asylums Bill," and the "Public Health Law Amendment Bill."

A SPECIAL meeting of the council of the University of Melbourne was held on Tuesday afternoon, December 18, in the Wilson-hall, for the purpose of conferring degrees on graduates at the preceding examinations. There were present the Chancellor (Dr. Brownless, C.M.G.), Dr. Fetherston, and Mr. Andrew Harper. As these did not constitute a quorum of the council, the Chancellor announced that he would admit the candidates to their respective degrees, leaving it to the council to confirm his action. The following is the list of medical degrees:—

Bachelor of Medicine.—John Chalmers Baird, Arthur Gideon Hugh Colquhoun, Gerald Eugene Cussen, Francis John Drake, Patrick James Flanagan, Edward Leslie Gault, Charles Herbert Hill, William Howard James, Thomas John Moore Kennedy, Edward Alan Mackay, Thomas Murphy, William Perrin Norris, James Ferdinand Rudall, Charles Seal, Francis Edward Webb.

Bachelor of Surgery.—Arthur Gideon Hugh Colquhoun, Francis John Drake, Patrick James Flanagan, Thomas John Moore Kennedy, Thomas Murphy, James Ferdinand Rudall, Charles Seal, Francis Edward Webb.

Doctor of Medicine.—William Lowell Mullen.

AD EUNDEM DEGREES.—Bachelor of Medicine.—Charles de Wolfe Heard (McGill University, Montreal). Doctor of Medicine.—William Camac Wilkinson (University of London).

A CONFERENCE of the Professors of the Australian and New Zealand Universities was held in Melbourne, on January 4 and 5, at which some important matters of University education and administration were brought forward. It was decided that the meeting on this occasion should be considered more or less of a preliminary nature, but certain committees were appointed to draw up reports on some of the most important matters discussed. These reports are to be submitted to the next meeting of the conference, which it was decided to hold at the same time and place as the next meeting of the Australasian Association for the Advancement of Science.

At the weekly meeting of the managing committee of the Melbourne Women's Hospital, held on December 21, the sub-committee which had been appointed to inquire into and report upon the question whether patients suffering from puerperal fever and other *post partum* ailments should be admitted to the infirmary

department of the Women's Hospital, presented its report, which in effect recommended that such cases should be excluded from that department. As the report was adopted by the managing committee, and is to be given effect to, the hospital is now totally closed to cases of that kind, and any liability of infection to the in-patients is considered to be effectually prevented. In order, however, that women suffering from puerperal fever or other diseases precluding their admission to the hospital might not be in want of proper treatment, it was decided that those who had not the means to procure the requisite attendance for themselves should be provided, at the cost of the hospital, with nurses and medical comforts at their own homes.

AN extensive fire took place on December 27, at the Alfred Hospital, resulting in the west wing of the institution being gutted. The fire is supposed to have originated through a flaw in the flue, connected with a small boiler in the basement of this wing, used for supplying water to the wards. The patients—69 in number—occupying this wing, which consisted of two stories, were promptly removed; they were placed in other parts of the building and in tents erected for the purpose, and so far are apparently not much worse for their removal. Great pluck and bravery was shown by the nurses and medical staff, and also by volunteers who came forward freely.

AT the final examination in connection with the nurse-training school of the Alfred Hospital, Melbourne, held on December 20, three pupils passed with credit, and four others passed.

DURING the month of December, 85 cases of typhoid were reported to the Central Board of Health, death resulting in 34 cases. There were 87 cases of diphtheria, of which 18 proved fatal.

A SEVERE outbreak of diphtheria is reported from Lang Lang East, 85 miles from Melbourne; five cases occurred in one week.

DR. S. M. CAFFYN, of Brighton, was charged at the local Police Court, on December 14, at the instance of the Society for the Protection of Animals, with cruelty to a dog, and by the police with practising vivisection. He was endeavouring to ascertain how long the animal could exist without solid food passing into its stomach, water only being allowed, besides injecting extract of beef under the skin. He stated that he kept two dogs, feeding one in the ordinary way, and injecting food under the skin of the other, which had gained 21b. in weight. A fine of 10s. was inflicted on each charge. The second charge, however, was withdrawn, and the fine was struck out.

DR. WILLIAM CRAMBE, L.R.C.S., Edin., 1829, M.D., Edin., 1830, M.D. (a.e.g.), Melbourne, 1863, died at Marine-parade, Abbotsford, near Melbourne, on Dec. 4th, at the ripe age of 82 years. The deceased gentleman arrived in the colony in 1862, and since then practised at Collingwood, a city suburban to Melbourne, up to within the last few years.

DR. WILLIAM GODFREY HOWITT, M.R.C.S., Eng., 1855, died from cancer at his residence, East Melbourne, on January 2, at the age of 55 years. The deceased gentleman arrived in Melbourne in 1862, when he was appointed Resident Surgeon of the Melbourne Hospital; afterwards he held the positions of Honorary Surgeon, and then Consulting Surgeon to the institution.

DR. MOORE, who arrived in the colony in June, 1886, died at his residence at Queenscliff on December 29.

PROFESSOR Dr. Allen, of the Melbourne University, has accepted the vacant position of President of the Intercolonial Rabbit Commission.

Dr. W. BALLS-HEADLEY, of Melbourne, has been elected President of the Medical Society of Victoria.

Dr. M. CARR has left Yarrowonga for Tasmania.

Dr. J. B. DONALDSON has removed from Rokewood to Yarrowonga, on the River Murray, 166 miles N.E. of Melbourne.

Dr. J. MURRAY GIBBES, of Brighton, has removed to Echuca.

Dr. W. A. MOSS, of Prahran, has succeeded to the practice of Dr. J. B. Donaldson, at Rokewood, 84 miles west of Melbourne.

Dr. JAS. ALEX. ROBERTSON, late of Richmond, has succeeded to the practice of Dr. G. R. M. Graham, at Echuca. Dr. Graham has left for China and Japan, en route to England.

Dr. GEO. SEEJEANT has removed from Ballarat to Echuca.

### MEDICAL APPOINTMENTS.

Davidson, Lewis Gordon, M.D. & Ch.M. Aberd., to be Government Medical Officer and Vaccinator for the district of Bowral, N.S.W., vice Dr. B. J. Newmarch, resigned.

Donaldson, John Blair, L.R.C.P. & R.C.S., Edin.; L.F.P.S., Glas., to be Public Vaccinator at Yarrowonga, Vic., vice Dr. M. Carr, resigned.

Elliot, Frederic John, M.R.C.S., Eng., elected Resident Surgeon of the Townsville Hospital, Qu.

Hooper, John Harward, F.R.C.S., Eng.; M.D. & Ch.M., Lond., to be Public Vaccinator for the district of Mercury Bay, N.Z.

Kilpatrick, William, M.B. & Ch.B., Melb., to be Health Officer for shire of Healesville, Vic.

Langhorne, Thomas Grant, M.R.C.S.E.; M.R.C.P., Edin., to act as Medical Officer to attend to the Destitute Poor and Aborigines within the district of Mayurra, S.A.

Manson, John Frederic William, M.B. & Ch.B., Melb., to be Health Officer for shire of Bet Bet, Vic.

Marwood, Arthur William, L.R.C.P. & R.C.S., Edin.; L.F.P.S., Glas., elected Resident Surgeon of the Geelong Infirmary, Vic.

Moss, William Joseph Aileine, M.B., Melb., to be Public Vaccinator at Rokewood, Vic., vice Dr. J. B. Donaldson, resigned.

Wickens, George Frederic, M.B. & Ch.M., Glas., to be Health Officer for shire of Ballarat, Vic.

Wright, Alfred Figg, L.F.P.S., Glas.; L.R.C.P., Edin., to be Honorary Surgeon of the Westport Naval Artillery Volunteers, N.Z.

Yorke, George William, to be Honorary Surgeon of the Brunnerton Rifle Volunteers, N.Z.

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### PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners by the respective Boards:—

#### NEW SOUTH WALES.

MacCarthy, Charles Denis, L. & L. Mid. K.Q.C.P. Irel., 1888; L.R.C.S. Irel., 1888.

Turner, Alfred Jefferis, M.B., Lond., 1884; M.D., Lond., 1886; M.R.C.S., Eng., 1884.

Abramowski, Otto Louis Moritz, State Examination Certificate, Berlin, 1876.

Brown, Walter Sigismund, M.R.C.S., Eng., 1888; L.S.A., Lond., 1888.

Kelly, Robert Vandeleur, L.R.C.P., Edin., 1873; L.R.C.S., Edin., 1873; F.R.C.S., Edin., 1880.

Woodforde, George Arthur Herbert, L.R.C.P., Edin., 1884; L.R.C.S., Edin., 1884.

For additional registration:—

Henry, Arthur Geddes, M. Ch. Univ. Syd., 1888.

#### NEW ZEALAND.

Deamer, George Edwin, L.R.C.P. & R.C.S., Ed., 1888; L.F.P.S., Glas., 1888.

Manning, Leslie Samuel, M.B. & Ch. M. Aberd., 1887.

#### QUEENSLAND.

Aird, Charles Mitchell, M.B. & Ch. M. Aberd., 1886.

Dobie, Henry Edwin Newman, M.B. & Ch. M., Glas., 1884; L. & L. M.D., R.C.S., Edin., 1884.

#### TASMANIA.

Carr, Michael, L. & L. Mid. K.Q.C.P. Irel., & L.R.C.S., Irel., 1883.

Chevallier, Charles Henry Temple, M.B. & Ch. M., Edin., 1888.

#### VICTORIA.

Fetherstonhaugh, Robert Trevor, M.R.C.S., Eng., 1886; L.R.C.P., Lond., 1886.

McCardel, Edward John, M.D. & Ch.M., Q.C., Kingston, Canada, 1884; M.R.C.S., Eng., 1888.

Hoysted, Lionel Norton, M.R.C.S., Eng., 1887; L.R.C.P., Lond., 1887.

Hayes, Edmond Fleming, L. & L. Mid. K.Q.C.P. Irel., 1888; L. & L. Mid. R.C.S., Irel., 1888.

MacDougall, Ronald, L. & L. Mid. K.Q.C.P. Irel., 1888; L. & L. Mid. R.C.S., Irel., 1888.

Thomas, John Caldwell, M.D., R. Univ. Irel., 1886; M.A.O. R. Univ. Irel., 1886; L. & L. Mid. R.C.P. & R.C.S., Edin., 1888; L.F.P.S., Glas., 1888.

Fyfe, Edward Henry, M.B. & Ch. M., Glas., 1888.

Daly, Ulick Arthur, M.B. & Ch. B., Dubl. Univ., 1878.

Drinkwater, Charles, M.R.C.S., Eng., 1886; L.S.A., 1886; L.R.C.P., 1887.

Showman, Louis Frederick, L. & L. Mid. R.C.P. & R.C.S., Edin., 1888; L.F.P.S., Glas., 1888.

Linton, Edward, L.R.C.P. & R.C.S., Edin., 1887; L.F.P.S., Glas., 1887.

Shells, William Francis Michael, M.R.C.S., Eng., 1888; L.R.C.P., Lond., 1888.

Cussen, Gerald Eugene, M.B., Melb., 1888.

Webb, Francis Edward, M.B., Melb., 1888.

James, William Howard, M.B., Melb., 1888.

Rudall, James Ferdinand, M.B., Melb., 1888.

Baird, John Chalmers, M.B., Melb., 1888.

Drake, Francis John, M.B., Melb., 1888.

Colquhoun, Arthur Gideon Hugh, M.B., Melb., 1888.

Flanagan, Patrick James, M.B., Melb., 1888.

Norris, William Perrin, M.B., Melb., 1888.

Seal, Charles, M.B., Melb., 1888.

Murphy, Thomas, M.B., Melb., 1888.

Kennedy, Thomas John Moore, M.B., Melb., 1888.

Mackay, Edward Alan, M.B., Melb., 1888.

Gault, Edward Leslie, M.B., Melb., 1888.

Hill, Charles Herbert, M.B., Melb., 1888.

Additional Qualifications Registered:—

Cole, Frank Hobill, Ch. B., Melb., 1887; Crowther, Frank Smith, Ch. B., Melb., 1888.

MEDICAL PRACTICE IN BRISBANE for Transfer. Address—"TRANSFER," care of Mr. Watkins, Chemist, Brisbane.

## REPORTED MORTALITY FOR THE MONTH OF NOVEMBER, 1888.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
<b>N. S. WALES.</b>														
Sydney .....	132,846	308	167	80	1	...	2	...	3	11	15	13	4	...
Suburbs .....	216,849	811	360	209	1	1	20	...	4	41	28	13	10	4
<b>NEW ZEALAND.</b>														
Auckland .....	35,639	...	...	...	...	...	...	...	...	...	...	...	...	...
Christchurch .....	16,217	...	...	...	...	...	...	...	...	...	...	...	...	...
Dunedin .....	24,334	...	...	...	...	...	...	...	...	...	...	...	...	...
Wellington .....	28,235	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>QUEENSLAND.</b>														
Brisbane .....	51,689	194	122	66	}	...	4	1	9	31	11	9	2	2
Suburbs .....	21,960	120	45	26										
<b>SOUTH AUSTRALIA</b> .....	311,384	792	316	134	...	1	16	...	7	33	28	18	11	4
Adelaide .....	43,527	91	80	31	...	...	1	...	4	12	10	10	2	...
<b>TASMANIA.</b>														
Hobart .....	31,926	74	36	7	...	1	...	...	...	1	2	5	...	1
Launceston .....	20,108	66	40	10	...	...	...	...	1	..	6	1	4	...
Country Districts.....	92,889	239	53	...	...	...	2	...	1	...	...	...	...	...
<b>VICTORIA.</b>														
Melbourne .....	69,774	164	122	} 385	1	5	14	1	8	87	73	48	19	14
Suburbs .....	275,606	1,165	697											

## METEOROLOGICAL OBSERVATIONS.

STATIONS.	THERMOMETER.				Mean Height Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.		Depth.	Days.		
						Inches			
Adelaide—Lat. 34° 55' 33" S.; Long. 138° 36' E.....	...	...	...	...	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S.; Long. 174° 49' 2" E.....	...	...	...	...	...	...	...	...	...
Brisbane—Lat. 27° 28' 3" S.; Long. 153° 16' 15" E. ....	152.	99.3	73.4	56.9	30.015	3.485	9	75	N.E.
Christchurch—Lat. 43° 32' 16" S.; Long. 172° 38' 59" E.....	...	...	...	...	...	...	...	...	...
Dunedin—Lat. 45° 52' 11" S.; Long. 170° 31' 11" E.....	...	...	...	...	...	...	...	...	...
Hobart—Lat. 42° 53' 32" S.; Long. 147° 22' 20" E.....	...	98.	57.4	39.7	29.871	2.23	10	67	...
Launceston—Lat. 41° 30' S.; Long. 147° 14' E.....	...	90.	62.	36.5	29.931	1.28	10	57	...
Melbourne—Lat. 37° 49' 54" S.; Long. 144° 58' 42" E. ....	...	102.	62.7	38.1	29.911	0.625	6	...	...
Sydney—Lat. 33° 51' 41" S.; Long. 151° 11' 49" E. ....	...	92.9	69.	56.8	29.994	3.28	11	67	N.E.
Wellington—Lat. 41° 16' 25" S.; Long. 174° 47' 25" E.....	...	...	...	...	...	...	...	...	...

could exist without some food passing into the stomach, water only being allowed, besides injecting extract of beef under the skin. He stated that he kept two dogs, feeding one in the ordinary way, and injecting food under the skin of the other, which had gained 2lb. in weight. A fine of 10s. was inflicted on each charge. The second charge, however, was withdrawn, and the fine was struck out.

# AUSTRALASIAN MEDICAL GAZETTE.

## ADDRESS ON ANATOMY AND PHYSIOLOGY.

DELIVERED AT THE SECOND SESSION OF THE INTER-COLONIAL MEDICAL CONGRESS, MELBOURNE, JANUARY 7TH, 1889,

BY T. P. ANDERSON STUART, M.D., PROFESSOR OF ANATOMY AND PHYSIOLOGY, AND DEAN OF THE FACULTY OF MEDICINE IN THE UNIVERSITY OF SYDNEY. PRESIDENT OF THE SECTION OF ANATOMY AND PHYSIOLOGY.

IN an address on Anatomy and Physiology one may either speak of the subject matter, as one would before a number of specialists in these branches of learning, or, one may treat them in a more general manner as one would before a purely lay audience; speaking, for instance, of their value as a discipline or means of education, or of their value in relation to the art of healing. Further, one may deal with them historically as they were in the past, descriptively as they are at present, or, prophetically, one may form anticipations of their future. I think I shall be most in harmony with the nature of this meeting if I take up more or less of all these lines.

### ON THE SCIENTIFIC CULTURE.

Before an audience of scientific men I do not need to advocate the training of the mind in science and scientific methods as a means of education and culture. That the scientific mode of thought and habit of mind fosters the love of truth for its own sake, and constitutes a thoroughly effective mental discipline, no member of this congress will doubt. That there is, in the cultivation of science, something which imparts a culture in as true a sense as does the study of letters, I do not need to urge here. That the recognition of a scientific culture, as such, is spreading among men anyone who notes the signs of the times can perceive. But this tardy recognition has come only after being fought for and struggled for against the combined forces of interest, ignorance and prejudice. The struggle is not yet over, so that it all too often happens that the scientific man has to waste in contention time and energy which he would fain give to his proper work. It should be added that the struggle is not peculiar to Australia—it comes from the older lands; in a sense, therefore, the legend of the University of Sydney is only too true: "*Sidere mens eadem mutato.*"

The attitude of the ancient Universities of Oxford and Cambridge is worthy of notice in this connection, for in these homes of culture, medical schools have been revived within the last few years. In some departments Cambridge is already worthy of the designation of a "great" school of medical science, and Oxford is making steady progress, and it is of interest to us in this place to note that both these schools of medicine date their real revival from the establishment of schools of physiology. Further, a statute has just passed through Convocation in Oxford, introducing, as optional subjects, the biological sciences in addition to the other sciences already so recognised, into the pass examinations for the B.A. degree. Perhaps in some measure connected with this academic recognition of science, there has, in recent years, I am told, been a distinct improvement in the manners and habits of medical students. Bob Sawyer is now as dead as Julius Cæsar. And yet let the tree be judged by its fruit, for when we think of the confidential relations which must of necessity exist between medical adviser and patient, when we remember the varied and oft-repeated temptations that beset the medical man in his practice, and when we think how seldom he has been found wanting, surely the medical and scientific education cannot have been a bad thing—nay, must have been a grand thing—since it could make such men out of such students.

### THE PHYSICIAN MUST BE A PHYSICIST.

In this place I include Chemistry as a branch of Physics in its wider sense. The progress of Physiology during its period of marked progress—say the last quarter of a century—shows very clearly that the energies at work within the body are in no wise different from the energies at work in the world without it. The sole difference is in the stage on which they play their parts. Time was, and not so very long ago, when a "vital" force was believed in as it now no longer is, and the phenomena of life were thought to be approachable only on lines somewhat different from those on which we would take up the phenomena of the world around us. But now the whole tendency of the time is to show that vital manifestations are phenomena to be studied as other phenomena are, and more and more is it clear, that the methods and laws of Physics are to be applied in Physiology. The physiologist is but a student of physics, in so far as concerns organised things, to the right understanding of which he must add also a knowledge of their structure. And—like the experimental physiologist—the physician, too, is con-

stantly called upon in diagnosis and in treatment to make experiments, to record observations, and to work out problems more or less physical—in optics, in acoustics, in hydraulics, in mechanics, in electricity and so on. For instance, the physician now employs electricity to obtain heat and light, to coagulate blood, to modify the nutrition of the tissues, as in the restoration of wasted nerve and muscle and the dissolution of tumours, etc. The physician even uses the galvanometer, and prescribes doses of electricity in milliampères, as he would prescribe degrees of temperature, or weights of drugs.

But it may be urged that the physicist must needs be so good a mathematician that a fair knowledge of physics is beyond the average mathematical attainments of the average student of medicine. This, however, is not the case—some mathematics he must know, but not so much as is often assumed, for indeed there are not wanting examples of men of high attainments in physics who were of but moderate mathematical attainments. I mention this because I desire to urge the study of physics as a *necessary part* of the training of the medical man, and accordingly, I wish to show that a lack of an advanced knowledge of mathematics need not stand in his way.

The proper position of the study of physics in a curriculum is not difficult to settle. It must be at the beginning, and it is a matter of no importance what it is called—it may be part of a preliminary scientific training, or it may be the beginning of the medical course—it is enough if it be there. But this raises the question of what the preliminary training of a medical man should be, a question of extreme importance in these colonies where medical schools are young, and, like other young things, plastic, because free from the trammels of use and wont, and largely free also, though unfortunately, from the influence of a medical public opinion, an influence, the absence of which on many grounds, is greatly to be deplored, but a contribution to the creation of which will, I trust, be one of the chief results of this Congress. The question takes us even further back—it takes us back to the school training.

#### ON THE SCHOOL TRAINING.

I confess that I am not sure how far the teaching of what is ordinarily called science may be introduced into primary schools, but I have no hesitation in saying that some measure of elementary scientific teaching should be given to all children without distinction. To the boy who will afterwards get such teaching at the University, where, in all likelihood, he will begin at the beginning, it is not a matter of such moment,

but for the great majority of boys, who will not get any instruction at all in natural science if not at school, it is a matter of the very greatest importance. Of course what I say of boys I say equally of girls.

It is unfortunately the case that, as yet, the best teachers are all literary and mathematical teachers, and consequently, the best teaching is still exclusively of a literary and mathematical nature. So long as the teaching of natural science in schools is a sort of extra thing, done at odd times, done in most insufficient measure and too often in an inefficient manner, so long as the study of letters and abstract mathematics thus completely overshadows the study of everything else, so long will the present unsatisfactory state of matters continue.

In parenthesis, as it were, I would strongly urge the teaching of drawing to every child in the school. I do not necessarily mean more than the drawing of a straight line, of a good curve, of a proper angle, and such like, so that in after life ideas may more frequently be conveyed by figures instead of by words only. The efficiency of this description by pictures as a training of the faculty of observation and of the mind is not, I think, questioned in theory, though sadly neglected in practice. The ancient Mexicans—a wonderful race—had no other mode of recording ideas. I would likewise urge the more frequent training of children in the art of verbal description. All sorts of objects should be placed before them, and they should be required after due observation to write down in words just exactly what they find. Such an exercise would be at once a training in observation, in composition, grammar, spelling, and writing. All teachers of science complain of the many young men and women who come to them with their eyes wide open and yet seeing nothing whatever. This faculty of description is in a large measure to be acquired by practice as every teacher of anatomy can testify.

#### THE NEW MEDICAL CURRICULUM OF THE UNIVERSITY OF SYDNEY.

Amongst other things we have secured for students the training in physics, of which I have spoken. Sydney, as regards the medical curriculum at least, is now well in the van of progress. Thus in Australia we were thinking on the same lines as they have been in the United Kingdom. The time evidently was ripe for a change. Here we had carried out what there they are still only thinking about.

Perhaps I might be permitted to say a word on the curriculum which we have striven to make as perfect as possible, and which—as finally



passed by our governing body only last month—is, of course, probably the latest thing of the kind.

As a guarantee of a sufficient general education, we require a degree in arts or in science, or failing a degree, a year's attendance on the classes of the first year of the arts course, together with the examination at the end of that year. As an alternative we have now as an entrance examination certain subjects of the Senior Public Examination. After this follows a course of five years duration. The student is mainly concerned in the first year with physics, chemistry, and biology: in the second and third years with anatomy and physiology: in the fourth and fifth years with the more special departments of medical science.

In every department practical instruction is insisted upon. It is our desire to educate and train rather than merely to instruct and cram. Further, we recognise that, while examinations of some sort are necessary, they are not an unmixed good, and in our practice we have to some extent anticipated the remedies suggested in that much needed signed protest, and the accompanying comments, published in the November number of the *Nineteenth Century*. We try to minimise the evils of the examination system as follows:—In the degree examinations the results of the class examinations which are compulsory, and are conducted during the course by the teacher alone, may be taken into account: there is an interval of two years between the first and second examinations: the teacher is co-ordinate in every way with the associate examiner; in every subject a practical or *viva voce* examination follows the written paper: there is no separate honours examination—honours depend on the high excellence of the student throughout his whole career.

We have made compulsory a course of ophthalmic medicine and surgery, and a course of psychological medicine. This is a step in the right direction which I commend to the attention of the General Council of Medical Education and Registration, and of many British licensing authorities.

Requiring attendance on a course of instruction in logic and psychology is a new feature. Thus the student becomes acquainted systematically with the general methods of science, with as it were the grammar and syntax of science, and is introduced to many of those problems of philosophy which have occupied the minds of men in the past, and which from the nature of his daily work can hardly fail to occupy his own. Also, by making it part of

the Bachelors' course, we avoid that annoyance so often experienced by the Bachelor proceeding to his Doctorate, when he finds that he has still to pass in logic, at a period of life when such examinations are peculiarly distasteful. I am bold enough to think and say that many institutions in the old country might with profit take a lesson from the young schools of these colonies—Melbourne, Adelaide, and Sydney.

Another point worthy of notice here is that at the end of the first three years of our medical curriculum the student can, with some extra work, obtain the Bachelor of Science degree. The science and medical curricula are now made practically identical as regards the first year, and we reckon that the next two years' study will, with some additional and advanced work, make up three years' work in science, so that the best and most industrious students of medicine can acquire a degree in science. We thus seek to emphasise the fact that the earnest man of medicine is a man of science in the truest sense of the term.

#### THE IMPROVEMENT IN TEACHING METHODS.

Nothing, I am frequently told, strikes men who received their teaching in the not very distant past, so much as the great care that is now taken to see that every student in each department shall have the maximum of practical work and the relative minimum of book work. The illustration of lectures is now carried to an extent before unheard of. I have heard it remarked that we make things too easy for students nowadays. I cannot think that, for with the advance in teaching methods there has been an enormous expansion of the subjects in every direction.

I think we may assume that the best text books contain a statement of what is fairly established. On this assumption an examination of some of the standard text books is very instructive, as showing the rate and extent of the expansion of our sciences—thus Quain's *Anatomy* was first written by Jones Quain alone—in the later editions there are always three editors: the 3rd ed. in 1884 had no illustrations and only 467 pages (when its actual 855 are reduced to the present standard); the 6th ed. in 1886 had 856 figures in 1096 pages (its 1635 being reduced to the present standard), and the last, the 9th ed. in 1882 has 1194 figures in 1617 pages. The editions of Foster's *Text Book of Physiology* follow each other in rapid succession—1st in 1876; 2nd in '77; 3rd in '79; 4th in '83—reprinted '84 and '86; 5th in '88.

SOME ACCOUNT OF WHAT ANATOMY AND  
PHYSIOLOGY HAVE BEEN DOING DURING RECENT  
YEARS.

While the influence of the doctrine of evolution has extended to every department of knowledge, it has influenced our own branches of science more directly than any other, and to it we owe much of our progress. Embryology and Comparative Anatomy are, as it were, at once its cause and its result. It is as pre-eminently the working conception of these sciences as the law of the conservation of energy is now that of physiology.

The progress of physiology has led to that of preventive as compared with curative medicine, and though the modern system of preventive medicine is only about forty years old, its development is now the great and high end of the efforts of medical men. The triumphs of sanitary science are now to be sought in every clime, in the barrack and in the field, in hospital construction and in hospital nursing, in the sanitary arrangements of the house, of the city, and of the entire community. In this connection it is greatly to be deplored that the Legislatures of the world—not of these colonies only—do not see it to be their duty to do more in the way of sanitary legislation, for, as has been so wisely said, the best way to make a people happy is to keep them healthy. This advance in sanitary matters has been greatly aided by the spread of knowledge amongst the people, by their greater proneness to ascribe their troubles to natural and often preventible causes, rather than to wholly inevitable workings of an unseen power whether good or bad.

In curative medicine, physiology, through pharmacology, has played a great part lately and is playing a greater part every day. Pharmacology, i.e., the precise knowledge of the mode of action of drugs and other influences affecting the organism—rests almost solely on physiology. But on the other hand, physiology owes much to the younger science; for instance, pharmacology has done much to clear up the nerve mechanism of the heart. From pharmacology, indeed, everything is to be expected. Huxley in his address before the London Meeting of the International Medical Congress in 1881, said of pharmacology: "there can surely be no ground for doubting that, sooner or later, the pharmacologist will supply the physician with the means of affecting, in any desired sense, the functions of any physiological element of the body. It will, in short, become possible to introduce into the economy a molecular mechanism which, like a very cunningly devised torpedo, shall find its way to some particular group of living elements, and cause an explosion among them, leaving the rest untouched." A perusal of Lauder Brunton's *Pharmacology*,

*Therapeutics and Materia Medica* tends to convince one that the goal is nearer than many think, for it is becoming clearer that there is a very close connection between the physiological action of a body and its physical characters such as its chemical constitution, its atomic weight and its spectrum.

Topographical anatomy has made such strides quite lately that its descriptions have had to be practically re-written. This is largely the result of the method of freezing, by which the exact relations and form of the parts are preserved; this method has its counterpart in minute anatomy in the freezing and embedding methods, as for instance, in the paraffin method, which gives such beautiful series of sections in ribbons, all the sections being good and each in its proper place. In my student days it was the fashion to say of human anatomy that it was played out, and I was quite of that mind. I do not think so now. There are still many good ears to be gleaned from the stubble in the field of human anatomy.

Embryology has made gigantic strides in recent times, unfolding not only the story of the origin of the individual, but also, in some measure, that of the origin of his kind. In teratology it has cleared away many difficulties by showing that monsters, as they are called, are not *lusus naturae*, sports, or freaks of nature, but are simply perversions of the normal type. In osteology, comparative anatomy and embryology have continued to throw much light on the meaning of the different centres of ossification in the bones of man, showing that the different centres represent distinct bones in other types. The homologies of muscles have been well worked at, and many ligaments and fasciæ have been shown to correspond to bones or muscles in other forms. Anomalies occurring in the human body have thus, in many cases, been explained. The mode of development and the comparative anatomy of the suprarenal bodies promise to throw some light on the nature and office of these mysterious bodies. The pineal body, or epiphysis cerebri, is now completely cleared up as the vestige of an early vertebrate eye. As to the pituitary body, or hypophysis cerebri, much doubt still remains—either it is a vestige of the old mouth of the vertebrate ancestor, or it is a vestige of a sense organ—and indeed there are many points in the development of the eye, and in that of the pituitary body and of its surrounding structures, that appear to be very remarkably alike, as if there had been a pituitary eye corresponding to the pineal eye before the present mouth was evolved. The coccygeal body now seems to be the vestige of the post-anal segment of the hind-gut, and the connection of the alimentary canal with the

neural canal through the neurenteric canal may yet explain many things. The carotid body of man and mammals, which has a structure very like that of the coccygeal body, may it not be a vestige of the second visceral cleft, to which it corresponds in position? The thyroid body too has been shown to have intimate relations physiologically to the nervous system and has been connected with cretinism and with myxœdema, and while still much remains to be done, something definite seems now to be known.

Pathology has made great strides by adopting the methods of the physiologist, and now it is hardly possible to separate the two sciences. Pathology, by adopting the experimental method, anticipates nature's experiments, which, as Foster remarks, are often too complicated, occur too seldom in circumstances favourable for observation, and oftentimes are too cruel altogether.

Bacteriology has grown out of pathology and is carried on by purely physiological methods; taken along with aseptic surgery it has already done much, though it is really only beginning; thus it has greatly helped in the diagnosis and treatment of suppuration, pyæmia, septicæmia, rabies, etc., and the surgeon now opens without hesitation cavities which he shunned only a quarter of a century ago.

Ophthalmology owes everything to the physiologist, and mankind owes much to ophthalmology. The right understanding of defects in the structure of the eyeball and its contents, has led to their easy recognition and treatment, and thus happiness has been secured to hundreds of thousands who would have spent their lives in misery. The remarkable increase of be-spectacled people—young as well as old—among us, is not so great an evil as many would think and some say. It is not that prevalence of eye-troubles is on the increase in the same proportion as the use of spectacles, but, it is probably in great measure simply because defects of vision are now successfully treated by spectacles, which, in earlier days, could not be treated at all. You doubtless remember that it is only thirty years since Mackenzie, author of the well-known book on eye diseases, used to recommend his hypermetropes—then known as asthenopes—to emigrate, in order "to follow the pastoral pursuits of an Australian colonist," so that they might have as little necessity as possible for near vision. That single physiological instrument the ophthalmoscope, invented by Helmholtz less than forty years ago—what has it not done for eye diseases, whether of the fundus or of the refractive media?—and see, too, how it has carried us a step farther back, for by letting us inspect the retina, it has really let us see a portion of the brain,

with all its vessels and tissues spread out to our view, and so has given birth to the whole department of medical ophthalmoscopy.

Physiological chemistry, from which we cannot separate pathological chemistry, has profited by the general advance in organic chemistry, and we need not be dissatisfied with the apparently slow progress in this most intricate subject. It has already done much for the practitioner of medicine in diagnosis, and its contributions to treatment in the way of artificial digestion of food stuffs, and of alimentation *per os* and *per anum* have proved of the very greatest value. From physiological chemistry great things are to be looked for in the not very distant future.

While the labours of so many have of late been directed to the life-history of organisms of such exceedingly insignificant size as micrococci, bacteria, and bacilli, and yet with activities so immensely important to all living things, at the same time there has been steadily accumulating a more intimate knowledge of the ultimate structural elements of the higher organisms—of cell-structure and cell-function, a knowledge which also concerns masses of extremely small size. This increased knowledge of the cell, owing to the universality of its object, is destined to exercise the greatest influence in anatomy, physiology, and pathology.

Improvements in the methods of histological research—of fixing the ever-changing protoplasm and of staining it: improvements in the making of lenses, together with improved methods of illuminating the object, have disclosed the fact, that within the cell a series of visible transformations occur, which accompany its activity. A certain group of these changes leads to the cleavage, or reproduction, of the cell, the substance of which, for this end, passes through an orderly series of stages, which, with certain accidental variations, retain their essential characters in all cells yet examined. Every month reveals some new object in which this process of "karyokinesis" is discovered, and it seems hardly too much to say that in this visible process, whereby the ultimate constituents of the tissues are reproduced, we have one of the fundamental characters of organized things. Perhaps undue stress has as yet been laid on the nuclear changes, because these have been so prominent, owing to the easy pigmentation of part of the nuclear substance. That important changes go on in the surrounding cell substance during karyokinesis is probable from the re-arrangement of the granules in the substance and from other appearances. These visible changes are but an indication that change—change visible and invisible—is to be sought in the cell which is thus as much the physiological as it is the ana-

tomical unit. But the histological unit of the complex organism is so much akin to the whole body of the unicellular organism, that it is with good reason that so much attention is being directed to the study of the lower forms of life.

There can be now, to my mind, very little doubt that there is a "cellular" anatomy, or, using the word in its physical rather than its chemical sense, a "molecular" anatomy which, though invisible to us, is yet as varied as is the visible structure of larger masses. We would on this assumption account for—I do not say explain—the different results that flow from the development of such apparently similar things as one ovum and another—they were really very different from the beginning, only we had not the means of appreciating the difference.

Comparative Physiology will one day show us that there is as intimate a connection between the vital manifestations of the various kinds of animals, as comparative anatomy has already shown to exist in regard to their structure. Indeed, if we assume that function and structure are correlative, then a complete comparative physiology follows a complete comparative anatomy, as a necessity. Accordingly, Golz, who has made out so much of the physiology of the frog, and then shown that what he observed in the frog was largely to be found in mammals, says that he will not be surprised if he some day sees a dog without a cerebrum feed itself, since Schrader has proved that a frog without its cerebrum can still catch flies. Perhaps such a dog will also be able to run about and to see as a rabbit can without its cerebrum.

#### ON THE FUNCTIONS OF THE CEREBRUM.

No one can read MacEwen's address at the meeting of the British Medical Association this year in Glasgow without seeing that a new era has dawned in surgery. Thanks to the labours of the anatomist in accurately describing the arrangement of the convolutions and sulci and their relations to the cranial walls and surface markings; thanks next to the physiologist and pathologist for determining the relation of certain parts of the brain's surface to the movements of the different parts of the body of man and of the lower animals; thanks lastly to aseptic surgery in enabling grave operations to be performed with wonderfully little risk to the patient from the operative procedure itself, the surgeon is now able to cure or to relieve many cases which, before the year 1870, were altogether beyond the pale of surgical interference. The first work was done as a matter of pure science—the first workers had no idea that so soon would their labours be turned to practical account. Even the general

public cannot fail to recognise the stride surgery has taken when it is told that the surgeon can, from a consideration of symptoms only, so accurately determine the situation of, say, a tumour, or of a depressed piece of bone, or of an effusion of blood, or of an abscess on or in the brain or spinal cord, cut down on it and remove the one or evacuate the other, with such security that as in MacEwen's cases eighteen recoveries followed twenty-one operations—and the three that died were all *in extremis* when operated upon. While then, clearly, we have established some physiological connection between the cerebral cortex and the peripheral parts of the body, when we enquire what is the nature of that connection we are immediately in difficulties, and this leads me to speak of the physiology proper of the cerebrum.

The March number of Pflueger's Archiv contains a most interesting and important work by my former teacher, Professor Golz of Strasburg, in which he describes the results of his recent work on the brain. The most important case he describes is that of a dog in which was removed at three operations the entire left cerebral hemisphere, including the corpus striatum and the optic thalamus, and after which the dog lived in perfect health for fifteen months, when it was killed in order to ascertain the exact condition of the nerve centres.

When the immediate results of the operation had passed away the dog appeared—apart from the effects of its having only one eye—a quite healthy and well-bred animal, friendly to friends, but yet disposed to growl when enemies were about. In the various movements of its body and limbs it did not manage the right side just so well as the left, but this was noticeable only by an attentive and practised observer. While the tactile sensibility of the right side was distinctly diminished, there was not a spot which was not sensible. Even the muscle sense was retained. It held a bone with its forepaws, using them as hands, and when food was placed on a board at some little distance in front of the bars of its cage, it would first try to get it in by using the left forepaw, but if this failed did not hesitate to try with the right forepaw, so that it still could voluntarily control the movements of the right side. The sense of sight was very markedly disturbed, but the dog was not blind,—it recognised its food by sight, followed its friends and perfectly avoided objects in its way, though on both sides of the field of vision, not on one side only, there was a mixture of diminished acuteness of visual perception along with the hemiambyopia. It was not pure hemiambyopia. The sense of smell was retained. Hearing was less acute. A stranger would hardly

notice any diminution of intelligence, but those who knew the dog before the operations agreed in saying that its intelligence was less. Briefly, then, while the sensibility of the right side was diminished, no part was insensible, and while it preferred to use the muscles of the left side, it could move any one of the muscles of the right side. Thus, each side of the cerebrum must be connected with every voluntary motor area and with every sensory area of the body.

The bearing of this case on cerebral surgery is obvious—we probably do not need to fear so very much the remote consequences of having to remove a goodly sized piece of the cerebrum on one side at least—if the patient must be operated on, and if he gets over the shock of the operation, there is not so very much to fear from the functional consequences.

The bearing of this case on our notions of cerebral function is also obvious—it entirely discountenances the notion of the existence of small circumscribed centres on one side of the cerebrum, that have an indispensable connection with muscular and sensory areas on the opposite side of the body, or that in these cerebral areas alone arise the will-impulses which eventuate in voluntary movements of the opposite side. The dog could use every muscle of the opposite side, and from every part of that side it could be stimulated to movements that could be the results only of conscious sensation, and yet the so-called centres were simply not there.

Had the cortex only been removed, the recovery might have been due to the basal ganglia taking up the functions, but then they too were not there; and, further, Golz says that he will soon publish a case in which one crus cerebri was severed without being followed by permanent paralysis, either of sensation or of motion, on the opposite side of the body. Evidently, then, one side of the cerebrum can take up the functions of the other.

The next question that arises is, can any part of one side take up the functions of any part of the other side, or can only the symmetrically corresponding part of one side take up the functions of the corresponding part of the other? For the answering of this question Golz gives some material.

After destruction of the anterior part of one side of the cerebrum an inexperienced observer would say that the dog was quite normal, though a trained observer would notice that the limbs innervated from the intact side are preferred, and are more deftly managed.

After deep and extensive destruction of the anterior moieties of both cerebral hemispheres, while no muscle is paralyzed, yet movement is permanently and gravely affected; the dog walks heavily and clumsily; it cannot feed itself at all,

or does it only with difficulty, and it can no longer use its fore-paws as hands. It no longer gives the paw when asked. Acuteness of perception and the intelligence are impaired to a moderate degree.

From these experiments Golz concludes that the frontal lobes of the cerebral hemispheres contain parts, which can take the place of each other. If one is destroyed the animal's movements remain fairly normal only so long as the frontal lobe of the other side is uninjured. The same, *mutatis mutandis*, may be said with regard to the occipital lobes.

On enquiring a little more minutely into the question, it would seem that it need not, of necessity, be just the symmetrically corresponding part of the opposite frontal lobe which takes up the functions, for if the so-called hind leg centre be removed from the left side of the cerebrum, the dog shows both motor and sensory disturbance of both the hind and the fore limbs of the right side of the body, but in a little time this disturbance disappears. If now the symmetrically corresponding part of the right side of the cerebrum be removed, a similar disturbance is noted, chiefly affecting both the fore and hind limbs of the left side, but after a longer period than before this too nearly disappears. (In neither of these cases are the disturbances confined to the limbs.) Now had the right centre alone taken up the work of the left centre, after the latter had been removed, had thus the one centre alone innervated all the limbs, the disturbance after the second operation ought to have equally affected all the four limbs. These results are entirely supported by the effects of electrical stimulation of a so-called centre, which, having taken up the functions of its fellow, should evoke movements of both sides—it does not—it evokes movement only of the opposite side. Further, if small portions of one side be removed at several operations—the operator waiting in each case till after the permanent condition has been established, *i.e.*, till after the substitution has been effected, then each succeeding operation is followed by exactly the same group of symptoms as the one before it was—only in a greater degree each time. Now had the centres of one side already taken up the functions of the portions removed from the other side, it could scarcely be that the same group of symptoms would follow each succeeding operation.

After extensive destruction of both occipital lobes the tactile, auditory, olfactory and other senses are impaired, but movements are just about as cleverly carried out as in a normal dog. It may still give the forepaw when asked and may perform many other such movements. There is a high degree of impairment of acuteness of per-

ception, and the intelligence is very low. It has lost the power of correctly judging things by visual sensations, though it sees, and, perhaps, in a sense, sees very well. Thus it avoids obstacles in its way, and if blindfolded, refuses to proceed, but tries to remove the plaster from the eyes; it avoids pieces of white paper on the floor, manifestly imagining them to be obstacles, when they really are not, and thus differs very much from normal dogs, and from dogs with impaired vision of peripheral origin, which, as every laundress knows, do not avoid white objects on the ground. There is what Golz terms a visual impairment of cerebral origin ("Hirnschwäche").

If both sides of the cerebrum be operated on, but not symmetrically, for instance, if the first operation destroyed an anterior and the second operation destroyed a posterior moiety, the dog shows no more motor disturbance after the second, than it did after the first, operation.

If it be objected that such cases do not help us to understand how it is that very small lesions often produce very marked symptoms, it may with equal justice be retorted, that the current doctrine does not help us in those cases of extensive destruction of cerebral matter, which we from time to time meet, without there ever having been any symptom whatever.

In regard to the immediate results of the operations, *i.e.*, the disturbances manifested before that condition is established, which may be considered as the final condition due to the removal or destruction effected, and with which alone we have hitherto been dealing, Golz makes the following general statement:—that what is seen in the first period after a given lesion, is the counterpart of what is seen in an animal after a more extensive lesion, but at a later period. This is especially the case with symmetrical lesions of the anterior parts of the cerebrum. What is seen only for a few days with smaller lesions is the condition which remains permanently after greater lesions.

If, then, we review these observations, we are forced to conclude, that, while the different parts of the cerebral cortex are not of equal value as Flourens taught, and, while, therefore, there is a sort of localization, yet there does not exist anything like that minute localization, in the existence of which many of us were inclined to believe only a short time ago, and of which Golz has been the constant and consistent opponent. At that time it was thought that one had just to go all over the cerebral cortex, and divide it into areas as we would mark out a map of Australia into its colonies and counties. Some of these areas would receive impressions, others would originate impulses, and all would be "centres."

If then this simple arrangement has been destroyed, what have we to put in its place? It does not follow that we can put anything at all. As Golz says—"Our real task is simply to settle accurately what kind of acts may still be carried out, and what may not be carried out, after definite lesions of the nervous system. Only a complete description of the facts can help in the performance of this task. I believe the time has not yet come when we may bring together these facts under a short formula or law".

Evidently, then, we must wait for "more light." We must simply go on recording the facts of cerebral pathology as John Abercrombie did fifty years ago, and as Golz is doing now. When a sufficient number of observations have been recorded, the meaning of all will come out clearly enough.

#### ON OUR MUSEUMS AND THEIR CLASSIFICATION.

The worker in science, must, of course, have ready access to collections of natural objects, and the time seems to have come when we should in these new countries where so much is done by the State either directly or indirectly, endeavour to classify more fully the contents and aims of the different museums. I am quite aware that this is already done to a large extent, but I know also that to a considerable extent it is not done, and before the evil is much greater and the remedy therefore less easily applied, I think we should make an effort to prevent duplication of collections, since it but leads to inefficiency as well as to waste of money.

It is, of course, only recently that museums of anatomy and physiology have been established in Australia, but already in a short time much has been done, and I take this very good opportunity of urging on practitioners of medicine the desirability, nay, the duty that for the general good lies upon them, of sending for preparation and conservation in an appropriate museum any noteworthy specimen which they may acquire in their practice. And it should be understood that when museums are beginning only, as in Australia, they cannot afford to be fastidious. It is a mistake to suppose that only rare things are acceptable. Almost anything may be sent at first, for until such time as good collections have been got together anything may turn out to be useful, and only the curators can know what is wanted.

#### ON LIBRARIES OF PERIODICALS.

Everyone here has, doubtless, felt the want of access to complete sets of scientific serial publications, without which original work is nowadays quite impracticable. The want is all the more expressed in Australia owing to the comparative

isolation of scientific men. As "iron sharpeneth iron," so in the older countries one learns much by conversation with men engaged more or less in the same pursuits as oneself—here we are often singly distributed, and frequently at great distances apart. Until the meeting of this Congress in Adelaide last year, and of the Australasian Association for the Advancement of Science in Sydney only a few months ago, there was no organised mode of bringing together from a distance men engaged in the search after knowledge. Living then in new places and very much alone, we do not benefit by that atmosphere of knowledge and the love of knowledge, that at once stimulates to investigation, corrects observation, and suggests new lines of research. As the means of locomotion improves, as population increases, as our universities and our schools become more fully equipped, as our citizens become more inclined to spend their means and end their days in the land where they have amassed their wealth, and when, in consequence, we have a larger cultured and leisured class, then gradually men here, as elsewhere, may learn what is going on by conversation with men; but till then we in Australia are very specially dependent on men's writings instead of on their living presence.

A complete Periodical Library is indeed one of our greatest wants. Original work appears first in journals and transactions, which should, therefore, be at our command as soon as possible after publication. In Sydney I have endeavoured to supply this want, in the first place by recommending for purchase by the University complete sets of the most important periodicals, and recently by bringing about co-operation amongst our nine greater libraries. I find that there is an immense quantity of scientific serial literature in Sydney, but that, alas, it is in a most unsatisfactory condition; important series, if not fragmentary, are incomplete; other, and often less important, journals are in duplicate and even triplicate, and yet withal some of the most important are not represented at all. The work of making a general catalogue is now well in hand, and I hope to have it completed before many months are over. The enquirer will be able to see at a glance if a journal is in Sydney, what numbers there are, and where it is to be seen. The librarian thus will see what sets he can complete by exchange or purchase, and what sets being taken by other libraries, may perhaps be discontinued by his own. My aim, briefly, is to have in Sydney at least one complete set of every periodical that is worth having. My dream is to have in Sydney a special library, where *all* such periodicals may be consulted. For many years, however, my catalogue will probably suffice. I ought to state that

great assistance has been given by the Principal Librarian of the Free Public Library. The catalogue will, I trust, be of value also to workers in other centres of Australia, where I hope something of the same sort may be done, so that a copy of every journal may be in the Continent somewhere. Delay is dangerous and costly. These sets are, many of them rare now, and if procurable at all, cost an ever advancing sum of money.

It is not unworthy of being prominently pointed out before leaving this subject, that our periodical medical literature is the pride of our profession—no other calling has anything like it. In a few months it places the whole world in possession of every discovery or suggestion that is likely to minister to the repair of injuries or to the prevention or cure of disease. Compare this with the times that are gone. We have it on good authority that, for forty years after they were given to the world, the teachings of John Hunter were scarcely known in France. There are thus no secrets with us. Our experience and knowledge are at once placed at the disposal of every man, woman, and child throughout the world, and so keenly do we feel this publication to be our plain duty, that we exclude from our society all who would attempt to conceal a remedy for any evil.

#### QUASI CURSORES VITAE LAMPADA TRADUNT.

And now I must bring to a conclusion what has proved a rather lengthy essay. I dare not hope that many words of mine will be long remembered, though I do hope that certain general impressions may remain from what I have said—as, that never were the seekers after truth in the medical sciences so numerous and so unwearying in well-doing as they are now; never were their labours more varied nor more likely to end in the relief of suffering; never was the future brighter nor more full of promise.

But, gentlemen, standing as we do between the rich past, and a probably richer future, does not a great responsibility, moral and intellectual, rest upon us? As we lean upon the past so we may expect that the future will seek to lean upon us. The physician-evangelist Saint Luke, says:—"Unto whomsoever much is given, of him shall be much required;" but he continues, saying what is not so often quoted—"To whom men have committed much, of him they will ask the more." It behoves us then not merely to hand on undimmed the lamp of intellectual life, but so to feed and trim it that we may hand it on burning more brightly than we received it.

Gentlemen, let us join in breathing the ancient sentiment, let medicine flourish, let us echo its very words, *florate res medica!*

## ORIGINAL ARTICLES.

ON THE PATHOLOGY AND CURE OF  
SNAKE-BITE.BY A. MUELLER, M.D., OF YACKANDANDAH,  
VICTORIA.

## III.

WE have hitherto followed the course of the subtle ophidian poison by tracing its deadening effects throughout the spinal and sympathetic motor-nerve centres in the form of paresis or a general relaxation of all contractile, and more especially muscular, fibres. This paresis is quickly intensified into more or less complete paralysis of the voluntary muscles, and we are justified in assuming that, when the latter is general, the poison has taken possession of the whole of the cerebro-spinal motor-nerve centres, including those of the sensory ganglia, but not of the hemispheres. These, however, are reached finally and quickly in well-pronounced cases. When the poison exerts its influence on the motor-cells of the grey substance of the hemispheres, the organs of thought and consciousness, both are quickly obliterated, paresis becomes sleep, paralysis, torpor and coma. It would carry us beyond the scope of this treatise to enter into a discussion as to the nature of the thought-process; but the arrest of this process, the complete obliteration of thought by a poison, interfering with the normal discharge of nerve-force from all the other motor-nerve centres, fully justifies the conclusion that thought is accompanied by a discharge of this force and cannot be carried on without it. The truth of this contention is self-evident, when thought is followed by volition, but it also throws considerable light on that silent transference of thought from brain to brain, which modern psychology has demonstrated to be possible and actual under certain conditions. To guard, however, against a materialistic construction and interpretation of it, special emphasis is laid on the term "accompanied," for the thinking principle, the "*nous*" within us, though requiring nerve action for its manifestation, is far more than the mere result of it.

The nature of sleep in the normal state is also beautifully illustrated by the action of the snake-poison, for when this action is slight, the sleep it produces in no way differs from the natural

sleep, the person awaking spontaneously or by the application of external stimulants, such as pinching or pricking the skin, ammonia injections, &c. Normal sleep then, it would appear from this, is merely a suspension of the functional activity of the motor or thought cells of the hemispheres differing in degree as the sleep differs in depth and intensity, and having for its object the rest and restoration of these organs ever active in the waking state. But even when the action of the poison on the motor-cells of the hemispheres is most severe, and sleep is intensified into coma from which no amount of external stimulants can awaken the patient, the essential condition is the same, and strychnine quickly rouses him into complete wakefulness. The condition of the brain during this coma is probably one of anæmia, yet this anæmia must not be regarded as the cause but rather as the consequence of the coma and of the general disturbance of circulation, resulting from reduced blood pressure. Even in its most pronounced form, after the bite of the tiger-snake, when it frequently lasts till death, it does not appear to be the immediate cause of it. Under its influence and the total suspension of all volition which it implies, the paralysis of the muscular system certainly becomes general and complete, if it was not so previously. Hence the popular dread of sleep in snake-bite and the anxiety to prevent it by dragging the victim about, a proceeding quite appropriate before, but sadly ludicrous after, the coma has set in. It may retard its advent, but cannot prevent it if the poison is present in quantity sufficient to produce it. As to the cause of death when it takes place under coma, the writer feels assured that even then it is owing to paralysis of the heart. I have now accomplished the task of demonstrating, beyond all doubt, that all the symptoms of snake-poisoning are the result of reduced and suppressed motor-nerve force, and of showing how from the lowest part of the anterior columns of the spinal cord up to the grey substance of the hemispheres, the poison takes possession of centre after centre of motor-nerve force, until it has invaded the whole. Unfortunately, however, the orderly sequence in which I have presented the symptoms in order to describe them is not in every case that of their actual occurrence, and it therefore devolves on me now to point out and explain certain irregularities, not only in the chronological order of the phenomena, but also in their strength and relation to each other.

In the first place it will readily be conceded that a poison so diffusible, unfolding its fatal action sometimes within a few minutes after being introduced, spreading with great rapidity, and



almost simultaneously over a number of motor-nerve centres, must usher in the symptoms resulting from the functional activity of these centres with great rapidity and thus cause them to mask each other, appearing simultaneous, though in reality, successive, and rendering obstruction of each very difficult. But another and still more potent cause of apparent irregularity must be sought in the fact that the poison of different species acts with unequal force on different motor-nerve centres, and even the poison of the same species differently on different individuals, the principle of action being the same. As illustrating this difference most pointedly, let us compare the effects of the cobra poison with that of one of our Australian species—say the tiger-snake. Both produce in the first instance paresis and then paralysis of voluntary muscles, but this paralysis after cobra-bite is concentrated in the glosso-pharyngeal and respiratory nerve-centres. The motor-centres of the hemispheres are only slightly affected, there being but a feeling of intoxication and consciousness remaining till death, which finally takes place through asphyxia, and under convulsions. The cobra poison causes pain in the bitten part, and by immediate paralysis of the vaso-motor nerve ends in swelling and effusion of blood around the bite, a fact which probably retards absorption and causes a longer interval to elapse between the bite and its first general symptoms. The bite of the tiger-snake causes no local swelling and very little local pain, but within a few minutes at times, and always in less than an hour, all the motor-nerve centres are reduced in action, and coma draws a veil over the sufferings of the victim; there are no convulsions, and if the case ends fatally, it is in coma, or even after restored consciousness—by paralysis of the heart.

How different again are the symptoms following the bite of the tiger and the black snake: The latter seldom produces coma, and even sleep following it is of short duration, but it concentrates its action on the motor centres of the sympathetic system, especially the vaso-motor ones. There is not the same amount of muscular paralysis, the patient though mostly unable to walk, is still able to move in bed, the arms especially, being almost free from paresis, yet, if a sufficient quantity of the poison has been infused he sinks lower and lower, and dies suddenly and quietly under symptoms of insufficient heart action.

The venom of the brown snake is varying in its effects, and like the colour of this reptile, occupies a position between the two last-named ones, sometimes approaching the tiger snake in rapidity of action and the depth of coma it produces, at other times being almost identical in effect with that of

its black confrère. Many years ago—when my views on snake-bite were as vague and undefined as those of the mass of my colleagues—I attended a case of brown snake-bite. The subject was completely paralysed, and in the deepest coma, the heart action feeble and struggling. The ammonia theory had just been published, and I had already treated one case—also of brown snake-bite—with success, but it had been a comparatively light one, the leg having been well ligatured above the bite, and the latter effectually excised. To avoid the ugly and troublesome sloughing which is so apt to occur by injections of ammonia into smaller veins, I laid bare the external jugular and carefully inserted the needle, which, to avoid possible phlebitis by repeated punctures, was left in the vein. The ammonia thus reached the heart at once, but, alas! beyond stimulating that organ for a minute or two after each injection, the condition of my patient remained unchanged, although a small sample of the blood taken after death, and heated, emitted a faint odour of ammonia. As a very striking proof of the peculiar capriciousness with which the snake-poison selects some motor-nerve centres and passes by others, the immunity of the arms from paralysis deserves notice. In cobra-bite cases this immunity appears to continue to the last, with us it only ceases with the advent of coma.

Among the irregularities now under consideration, convulsions finally must be mentioned. They are frequent in India, but comparatively rare with us. The writer has seen only convulsive muscular twitchings in a few instances following snake-bites. General convulsions, however, are known to have occurred, and they are very common with snake-bitten dogs. Their *raison d'être* must, probably, be sought in individual idiosyncrasies. With exception of the carbonic acid convulsions attending cobra-bite, they are evidently caused by the motor-nerve cells reacting against the encroachments of the poison, instead of succumbing to it at once. This power of reaction pre-supposes an unusually powerful and well organised central motor apparatus only rarely and exceptionally possessed by a human being. The dog evidently possesses such an apparatus, for the amount of motor-nerve force put forth by a dog during a day's hunting, for instance, would exhaust the most robust and active hunter's resources long before the day's end. Unfortunately for man's true and faithful friend this resistance availeth nothing, for the more highly developed a motor apparatus is, the quicker it succumbs to the insidious enemy. This circumstance, as well as the fact of dogs being extremely sensitive to the effect of strychnine, should be

kept in view in estimating the very doubtful value of experiments on dogs with these two poisons.

By far the most difficult of explanation among the symptoms of snake-poisoning, and the most fruitful source of error in the interpretation of these symptoms, are the peculiar and characteristic blood changes accompanying snake-bite. The dark fluid condition of the blood combined with the death and disintegration of so many blood corpuscles were taken as *prima facie* evidence of a wholesale blood poisoning process, and all the other distressing symptoms merely as the result of it. I will now endeavour to show conclusively, that the snake-poison is not a blood poison, that it has no antiplastic effects, and that the changes in the blood of its victims can be accounted for satisfactorily on the theory I have advanced. For this purpose I relate a few experiments.

To ascertain, in the first place, whether the snake-poison has any direct and immediate antiplastic effect on the blood, I carefully dissected the poison glands from the head of a tiger-snake specially shot for that purpose. The glands were thoroughly crushed in a small mortar, with a few drops of water added, and all the liquid separated by pressure dropped into a test tube. I then procured a young fowl and opening one of its carotids, allowed the warm blood to flow on the poison until the tube was nearly filled. It was then immediately corked and immersed into water of blood heat, where I kept it for some ten minutes, all the time keeping the blood in motion by shaking the tube. Examination of it proved that it had not changed *its bright colour*, but rather increased it, *that it had not become more liquid, and that its corpuscles were perfectly healthy and intact*.

Next morning I found it congealed like any ordinary blood, and following up the experiment, injected 10 minims of the serum into an old hen. The animal commenced to show the usual symptoms of poisoning in a short time, and was dead in less than two hours. Collecting some of its blood from the left ventricle and the aorta in a second tube, I compared the two. The difference was marked. *The blood from the hen was dark, liquid, and under the microscope presented irregular fragments of broken up corpuscles.*

In a second experiment I diluted all the poison I could extract from the glands of a brown snake in a test tube with water containing amœbæ and other infusoria. This I examined from day to day, under the microscope, to find the infusoria not only increasing in number, but actually new forms appearing, which I had not noticed before.

Accidentally, I have found since that even insects with a rudimentary nervous system will

revel in the snake-poison. The head of a tiger-snake had been left exposed to the flies in my surgery for a day, and when I took it up for dissection, was found to be alive with maggots. I placed it under an inverted tumbler until the glands and all soft tissues had been thoroughly invaded and mostly consumed. The maggots grew to a large size, and not one of them died.

From these experiments it may safely be inferred that the snake-poison does not attack and destroy protoplasm, and that if amœbæ and other infusoria live and thrive in a comparatively concentrated solution of it, the blood corpuscles are not likely to succumb to the direct contact with it in the living body, more especially not when they remain entirely unaffected by it in a test tube under conditions above described. We are therefore driven to the conclusion that by the action of the snake poison they are placed under conditions incompatible with their healthy normal state and their life, and that these conditions are brought about by functional depression of the vaso-motor-nerve centres.

There appears to be little room for doubt that they are living organisms, *corpuscula viva in corpore vivo*, inhaling oxygen and exhaling carbonic acid, that, in fact, our respiration is but the collective result of their respiration. After whirling through the body and carrying to every tissue the life-sustaining oxygen and the materials it requires, guided by the intelligence that rules the atoms as it rules the worlds, they finally return to the lungs, each carrying a full cargo of effete matter in the form of carbonic acid, to unload it in exchange for a fresh supply of oxygen. But as I pointed out already, to effect this exchange in the finest capillary vessels, where no doubt it takes place, vessel and corpuscle must touch each other intimately, and for this purpose the vessel must maintain the elasticity and tension which is imparted to it by an uninterrupted and steady supply of motor-nerve force. With this supply taken away or only reduced, the vessel at once gives way to the blood pressure, its lumen becomes larger than the diameter of the corpuscle, and the latter, now surrounded on all sides by serum, is driven on into a vein without effecting its purpose more than partially, if at all. Attracting in its onward course still more carbonic acid, and not getting rid of it when again it arrives in the lungs, it finally dies, literally bursting with carbonic acid. This is the explanation of the blood changes I venture to submit. It has, I am aware, some hypothetical elements in it, which orthodox physiology may question, but is consistent with a theory covering all other phenomena, and for this reason entitled to be maintained as correct until a better one is advanced.

**CASE OF EXTENSIVE COMPOUND COM-MINUTED FRACTURE OF SKULL.—RECOVERY.**

(UNDER CARE OF DR. M. O'CONNOR.)

REPORTED BY T. CARSON FISHER, M.D., CH.M.,  
RESIDENT MEDICAL OFFICER, SYDNEY  
HOSPITAL.

On the evening of May 18, 1888, a thin young man, named E. K., *æt.* 30, was admitted into the Hospital, suffering from the effects of a blow on the head by a glass tumbler, which was thrown at him in a public-house row. This account was given by a man who accompanied him.

The patient was conscious, able to sit up, and tractable and obedient, apparently understanding perfectly what was said to him, but aphasic. His breath smelt alcoholic, but he seemed sober. Pupils were equal and reacted to light. Pulse, 105; skin cool; no paralysis of face or limbs.

On the left side of the head was a curved wound  $2\frac{1}{2}$  inches long, transverse in direction, about 3 inches above the tip of the ear, its anterior end being about  $2\frac{1}{2}$  inches behind the external angular process of frontal bone. The scalp was cut through, and at the bottom of the wound several comminuted portions of loose bone were felt, corresponding in extent to the external wound. There was a space about one-third of an inch wide between the edges of bone, in which the pulsation of the brain covered by its membranes could be seen and felt.

Dr. O'Connor, about an hour after the man's admission, removed several loose fragments of depressed bone from the margin of the fissure, so that there was visible an area of uncovered dura mater, of irregular oval shape, about  $2\frac{1}{2}$  inches long, 1 inch in the transverse, and vertical diameter. One small punctured wound in the dura mater was revealed by the welling up of blood through it. Bleeding from the arteries of the scalp was checked by pressure, while 3 clip forceps included in their grasp the bone and some divided meningeal branches. A moist sponge with slight pressure was put over the wound.

May 19th.—He had no marked symptoms of cerebral lesion beyond aphasia of a peculiar type. He understands what is said to him, and can answer in monosyllables, but cannot form a sentence. He seems to have command of ideas, but to have difficulty in articulating any beyond the simplest and single words. His intelligence seems quite unimpaired. The edges of the wound were united by three harelip pins, all bleeding having ceased.

May 20th.—He complains of pain and stiffness along the left side of the face and neck. Says his "tongue stiff" when asked to protrude it. He does so with some hesitation, and it de-

viates slightly to the left. He can write his name and address in shaky but legible characters. The right side of the face is less mobile than the left, and there are occasional slight twitchings of the left angle of the mouth.

May 22.—Complains of pain along the back of the neck; the temperature during the last two days has varied from F. 101° to 102°; two harelip pins were taken out.

May 23.—His power of speech is improving; He all along has amused himself with reading; suppurating at posterior edge of the wound.

May 24.—Facial paralysis is less marked; speech better.

May 28.—Wound is quite open; granulations exuding pus cover dura mater; bagging of scalp behind and below the wound, requiring counter openings.

June 10.—He has had slight cellulitis of scalp around the wound, treated by free drainage and frequent dressings; edges of external wound are now about half-an-inch apart; healthy granulations cover the dura mater; speech is now much improved, and facial paralysis is gone.

July 13.—Made an out-patient; the wound is rapidly closing by a healthy granulating surface.

When last seen the patient was in good health, well nourished, and free from any remnant of paralysis. The wound had contracted into a fibrous, firm scar, concealed by the hair which grew around it.

This case illustrates the fact that extensive fractures of the skull, with little or no injury to the brain or its membranes, allow of recovery without dangerous symptoms.

It shows also Nature's method of repair. The large hole in this man's skull was filled by tissue so firm that it formed a covering nearly as effectual as bone itself. The site of the brain lesion is of some interest. The motor aphasia was the first and prominent symptom, and preceded by a few days the facial paralysis, which was incomplete, the upper part of the face being little affected, as is usual in lesions of the motor path between the cortex and the nucleus of origin of the facial nerve. The centres for movements of the mouth, lips, and face lie grouped closely together about the lower end of the fissure of Rolando, and this area was crossed by the wound.

The form of aphasia noticed in this case is termed *Aphemia* by Bastian, who thinks that the lesion causing it is in the subcortical part of Broca's convolution, *i.e.* involving the internuncial fibres from the left speech centre (glossokinetic centre as he terms it) to the Bulbar-motor centre.

If this is so, an injury to this subcortical region would easily propagate irritation, and conse-

quent impaired function in near districts. Hence, the speech affection in this case was followed by partial facial paralysis.

The transient nature of these symptoms, and the rapid and perfect recovery would indicate that no very serious contusion or laceration of the brain or its membranes was caused by the fracture, or the depressed fragments, which fortunately were speedily and completely removed.

### A CASE OF TUMOUR IN NASOPHARYNX.

BY WILLIAM F. QUARF, M.B. ET CH.M.

A YOUNG man, aged 19, has been suffering in England since childhood from chronic rhinitis with polypi, causing obstruction to the passages, and mucous discharge from both nares and back of throat. The polypi were removed by Mr. Durham 18 months ago, and the roots cauterised so successfully that only one polypus has grown since. No rhinoscopic examination was made at the time. But the state of lungs, and condition of respiratory passages was so bad that he was sent to Australia for his health. The lung trouble seems to have quite gone; but I found a good deal of obstruction in nares, granular pharynx, and an immense brawny infiltration of soft palate and arches. Finding that the removal of the polyp in the left nostril did not improve matters, I examined rhinoscopically, and discovered a tumour, which was attached in the middle line to septum, and blocked up the two meatus. This growth was of the size of a small walnut, firm to the touch, and firmly attached in the middle line: so that the finger could pass all round it. In the mirror it looked pearly, and at one part there was a large strand of capillaries. It must have been there for years, and to it I attributed the chain of symptoms.

I removed it by means of a Jarvis' ecraseur passed through the right naris, and on account of the size of the pedicle attaching it to septum, I had some trouble in getting the wire fixed with a firm and unyielding grip. It took an hour to bite through and there was very little bleeding. The growth is what Mackenzie calls a fibro-mucous polypus and is non-recurrent.

The subsequent progress of the case is highly satisfactory. The soft palate is pale and soft in consistency, though still thickened; the discharge is greatly diminished, and except for an occasional erection of one or other of the turbinated bodies, to which he is still liable, the obstruction is quite gone. He sleeps now at night with his mouth shut; and his general state is very much improved.

70 Hunter St., Sydney.

### CASE OF NOMA.

BY ST. GEORGE QUEELY, MEDICAL OFFICER,  
MATTOWE HOSPITAL, NORTH QUEENSLAND.

THE following case has just come under my notice, and may be of some interest:—

Jessie Mack, æt. 9, had been suffering for about five days previous to my seeing her with swelling and inflammation of right labium, which her mother had poulticed continually. When I saw her on the evening of the 12th inst., the right labium was greatly swelled, of a dark red color, very painful to the touch, and about the middle of it, there was a small shallow ulcer; tongue foul, skin hot, pulse quick, and bowels confined.

No history could be obtained, only she felt an irritation there a few days before she complained. She had always been a healthy child, her only illness being an attack of measles about four months before. At first her father thought she got hurt riding across the fence, and suggested a splinter, but of this there was no sign. On the third day of my visit both labia were very enlarged and of a deep red color, ulcer about the size of a three-penny piece, and a second, but smaller one, above first. Child screams on slightest movement; urine is passed with *difficulty*, in standing position, causing great agony; slight discharge from vulva, from which the epithelium is stripped, leading to ulceration the next day. On the fourth evening great itching set in, which lasted some hours in spite of all treatment. Fifth day—symptoms much worse, glands in right groin enlarged and inflamed, abdomen swollen, ulcerations larger, fresh ones appearing on fourchette, and perineum buttocks covered with a rash. Vulvar opening continually closed by discharge, labia gangrenous, bowels open, passing dark green matter of very offensive character. On fifth and sixth nights patient slightly delirious.

Symptoms unchanged on seventh day, but from the eighth the disease seemed to decline, and on the sixteenth patient was able to leave her bed, and two days afterwards was convalescent.

On first visit I diagnosed the disease as phlegmonous inflammation of labia, but as there was no formation of pus, or abscess, and as ulcerations appeared gangrenous, with ash-colored secretion and dusky-colored skin, I saw that I had to deal with a more serious affection, which, fortunately, is not of frequent occurrence in Queensland, namely, *Noma*.

*Treatment.*—Child confined to bed and absolute cleanliness enforced; ordered her to be placed sitting in a warm bath, into which a little potash permang. was thrown, three times a day; parts to be syringed gently with Condy's Fluid. A lotion of opium and carbolic applied on lint. Obligated to chloroform patient while dressing was changed. The ulcerations were checked by the free use of the solid argent. nit. I found zinc ointment made with vaseline and a little carbolic acid of more use, and better borne by the patient than any other application; in fact it was the only thing that seemed to give relief from the excessive irritation, and from the time I commenced the ointment the disease seemed to fade. I used it very thickly, and always had plenty between lips of vulva. Internally I gave quinine and iron, with abundance of strong liquid, nourishing food and port wine. The bowels were relieved by saline aperients. I believe now that this gangrenous inflammation of labia was a sequela of the measles, as I find since that the child was neglected during the attack, and that she fell into a low state of health in consequence.

#### PARALYSIS AFTER COMPOUND FRACTURE OF THE SKULL.

TREATED BY TREPHINING.—RECOVERY.

REPORTED BY DR. MARWOOD, RESIDENT SURGEON, GEELONG HOSPITAL, VICTORIA.

J.J.K., aged 1½ years, the day previous to admission (Nov. 15, 1888), fell out of bed, striking his head against a small iron cot. His mother brought him to the Geelong Hospital, stating he had fits!! (clonic spasms?) ever since.

Dr. Hope and I, on examination, found a small punctured fracture over the right frontal bone. The patient had left hemiplegia and right pupil dilated; breathing stertorous, and pulse small.

Trephining was decided upon, which was performed by Dr. Hope, a portion of the inner table, about the size of a sixpence, was found to be detached and pressing on the brain. This was elevated, the wound dressed antiseptically, and the child put to bed. Within twenty minutes after the operation all signs of paralysis had disappeared.

The temperature in the evening was 101·6, from that time the child made steady recovery, and was discharged three weeks after, with the wound almost completely healed.

The chief points of interests are:—The small size of the fracture, causing such extensive paralysis; and the immediate improvement after the operation.

#### ON THE ETIOLOGY OF TYPHOID FEVER.

BY H. RAEL, M.D., MURTOA, VICTORIA.

THE papers read at the Medical Congress, and the discussion following on the etiology of typhoid fever, lead me to believe that the teachings of that chair of Hygiene are nearly totally ignored, which is the oldest and first established in Germany, and, I believe, in whole Europe, that of Munich in Bavaria, held with such advantage with both science and students by Geheimrath von Pettenkofer.

But the question asked by Professor Allen, to solve the puzzle he found in his milk-contamination case especially induces me to make the following remarks.

Everyone of the speakers seemed to be imbued with the opinion that there is no other introitus for the germs of the disease quoted than that per os, and nearly every practitioner speaks of some outbreak as an "unmistakable proof" of the origin from polluted water or milk. Logic teaches us that one case, or even hundreds of single cases prove nothing to found a theory on as long as they are not considered from every possible point of view, but only a great multitude of cases during a series of years occurring with a certain regularity and rhythm tend to show us the law of nature.

It has been shown through carefully compiled statistics carried on through decades of years in Munich, Berlin, Augsburg, and other large towns, that the typhoid morbidity and mortality goes hand in hand with the variations in the level of the underground water (Grundwasser-Schwankungen) in *reverse* proportion. It has further been shown through the statistics of the metropolis of Munich, carried on for so many decades of years that the terrible epidemics to which this town was subjected up to recent years were solely due to the pollution of the ground by nightsoil and other refuse of human residence, the rapid decrease in this sickness having set in since these conditions were altered. The other conditions, that of water and milk supply, having not undergone any alterations (the new magnificent water supply of Munich was only opened several years after the decrease had actually set in), it is not my duty to go into details of this; they must be studied as they are laid down in the "Archiv für Hygiene."

A short explanation of this fact is this:—If the underground water is at a low level the continuous air current going in an upward direction carries the bacilli and other germs swarming in the subsoil soaked with putrid material along with it into the houses; at a high water level, and

when the subsoil is in a high degree of moisture the germs are tied down as it were by the water, and the air-current is relatively or totally free of them, just as the surface air is free of dust after rain, or when coming from a district where rain has recently fallen.

One of the first experiments shown in a hygienic lecture is that to demonstrate the air-current coming from the underground drainage into the house, and escaping by the roof and chimney. The air in the house being naturally, at least the most time of the year, warmer, and therefore thinner and lighter than outside, attracts the air-current from below, and even from a wider area than that on which the house immediately stands; especially at night, when all the doors and windows are closed, therefore there is no counter-current on the surface, and the difference in the temperature between inside and outside greatest, this current coming from the deep seems to be strongest, and therefore the night proves more dangerous than daytime. This gives an explanation of local epidemics, why one house may be infected, and a neighbouring one may be free from it, if in the one all refuse and effal of human beings is left to soak into the ground, and in the other one it is drained or carried away.

Geheimrath von Gietl, who in the obituary column of a recent number of the *Lancet* was so graphically described as a "German Sydenham," from his large experience used to have every house-number of the city of Munich in his head, and could at once tell if the respective one the patient came from was a typhoid-focus or not, and more so yet with streets, when whole streets used to share the same fate from the "laissez-aller" indulgence of their inhabitants.

These theories were so hardened by evidence accumulated through a long series of years, that they seem to be the foundation stone upon which to build, and that was long before the bacteria boom set in.

As Dr. Robertson and others have pointed out, and as Dr. Jamieson so ably demonstrated, the acme of typhoid fever occurrence falls into the second half of the Summer and into the Autumn. Our main rains that are decisive in influencing the level of the underground water, occur as we all know in Winter, and every farmer knows that 100 points of rain in Winter have more influence on the soaking of the subsoil than 150 or 200 points in Summer. The transient and superficial moistening of the Summer rain does not affect the deep-water level, but is only beneficial to vigorous putrefaction, absolute dryness of the medium being incompatible with active bacillus life. Therefore we may well expect

increase after Summer rains, as Dr. Springthorpe has pointed out, but should not, as it is proved for Europe, the maximum of cases go hand-in-hand with the lowest level of the underground water, or should the typhoid fever be such a different thing here that it would rest on quite different conditions?

Quite recently (March 1888) Dr. Buchner, of Munich, published the results of a series of experiments (*Münchener Med. Wochenschrift* Nr. 16 and 17, 1888) "*Ueber den experimentellen Nachweis der Aufnahme von Infectionserregern aus der Athemluft*," showing positively not only the possibility, but the facility of infection by certain diseases through the air passages, nay even that minimal quantities suffice in producing infection through the respiratory organs, quantities which are quite inefficient when taken per os. Dr. Buchner has experimented with Anthrax, chicken cholera, and rabbit septicæmia on 140 animals by inhalation and on 79 animals by feeding. Of the 140 animals exposed to inhalation, 96 died of the respective diseases subjected to, or 68·6 per cent.; of the 79 animals fed, 7 died or 8·9 per cent.; showing a ratio in the dangerousness of inhalation to feeding like 68·6 to 8·9; but actually the difference is much greater, the quantities fed being so much larger than those inhaled.

All "blood parasites," that is all parasites that are able to live and propagate in animal blood, are in Buchner's opinion apt to bring about infection of the organism through being inhaled. With typhoid fever he has not experimented, because at present there is no species of animals known with a disposition to typhoid, but I suppose the time is not very distant when a positive result in this respect will be brought forward too. To make himself closely acquainted with these experiments, and carry them further would be a fruitful task for every pathologist. Taking up Professor Allen's case again, would it not be best to throw the whole milk contamination question overboard, and consider the origin from a different standpoint. There are cases of outbreak from this and that source being reported by Medical Practitioners, but I question if these cases produce any evidence of scientific value at all, there being so many points to be considered, which are only too easily overlooked by an eye not trained in hygienic research, the mind being besides directed by preconception of an old favourite idea. If the fact of the presence of a typhoid fever patient in a dairy should be sufficient proof of the cause of an outbreak, I may justly claim to have stated a proof in the negative on the same grounds. I know of a typical typhoid fever case in a dairy, that dairy supplying a great number of homes. The mother nursed her child, and the same mother milked

the cows. I was questioned by one of the milk consumers if he should not better stop the supply. I told him quietly to continue, assuring him I could guarantee for his safety. I do not raise the question of the prudence, or otherwise, of such a declaration on my side; coincidence may happen, however, not a single case occurred at that time in the locality in any of the numerous homes kept under a strict supervision. I would be the last to give this as a "proof" against the possibility of infection from this side, but such samples are constantly supplied by the most experienced practitioners when it tends to show the affirmative side.

Dr. Carstairs in his paper stated as cause for the prevalence of typhoid in Summer resp. Autumn, the high temperature and a temperature of 70-100° as the most favourable conditions. How is typhoid fever possible, in the midst of Winter, in Germany, in January, where, sometimes the acme happens to be, depending as it does, on the low level of the underground water, when the surface is frozen to a stone's hardness.

But the typhoid fever germs seem to breed in a depth unaffected by the surface temperature. This very point explains why it takes a certain time, a certain number of years, until the conditions of its outbreak are fulfilled on a *newly-settled place*. Take for instance Murtoa, a settlement of about 14 years of age. The first case occurred five years ago, immediately followed by others and by a rather severe epidemic. Since then a number of cases occurred every year, but there was a constant decrease numerically year by year, until this year hardly one case has occurred up to date. The medium seems to be exhausted by the very processes of life by the bacillus. It will take a number of years again till sufficient material is accumulated for the vigorous life and propagation of that primitive being, just as it required the eight or nine years till the foul soakage had reached the depth necessary for the conditions of life of the germ, the oxydising influence of the soil and air was no longer able to keep the accumulation of decomposable matter, the medium of the germs, in certain limits, the soil got overwhelmed by the overdose.

Everyone that is familiar with the culture of germs knows that they will not grow well if the medium is either too much diluted or too concentrated. The fitting medium to feed upon being exhausted for the time being, typhoid fever would naturally die out until the required concentration is reached again. This would account for the periodical appearance.

The fact that a certain concentration of the medium is required for active and healthy

bacteria-life demonstrates why you may with impunity bury typhoid fever evacuations without any other disinfection, the soil being a splendid disinfectant itself, an oxydiser, as long as its powers are not overthrown by overloading; or why you may eat with immunity the cabbage manured by a formidable layer of typhoid fever defæcations, the tillage of the soil and the roots of the plants being important factors in helping the ground to forward decomposing matter quickly through the various stages of oxydation, and so is the food snapped away from the bacteria's mouth. Would we empty the sewerage on the ground and leave it all to nature's own exertions without agriculture, this very ground would soon become the source of all possible infectious diseases; but by digging, or rather ploughing and planting, we materially assist nature in the work of oxydation. This is so natural that I must beg the pardon of the reader to mention it at all. With the food supply cut off I do not mean to say that the bacteria or whatever you may call it is out of existence, but it seems to pass into a latent, dormant stage and to lose its virulence, resuming venomous activity when in full vigour of life, breeding and propagating in a certain concentration of the medium of decomposing animal matter. To show the different stages of the microbe, its *modus vivendi*, would be the next task for the bacteriologist. That these different stages—an indifferent and an active one—do exist we must certainly presume.

Dr. Kirtikar remarked on the absence of typhoid fever in India (tropics) in spite of the proverbial abundance of filth, yet he described clinical as well as pathological symptoms of a disease which leave little doubt as to its real nature. I myself, during a brief stay in Sumatra, had the opportunity of testing a most typical and severe typhoid fever case. He was treated with ice and cold baths, and did well.

The water-carriage system is not an absolute demand of hygiene as long as the pan system is conscientiously carried out; but that is where the difficulty lies. But underground drainage is absolutely necessary to carry off the watery refuse quickly and in an efficient manner, the fluid waste of human residence being quite as dangerous as the solids, as their contents of Nitrogenous compounds is generally underrated.

In concluding I may be pardoned in exhorting to avail ourselves of the vast material already accumulated, comparatively young though the *science* of hygiene is. How would progress be possible if everyone would be holding and propagating and festering an opinion of his own, ignoring the facts and data produced by many years' hard labour of acknowledged authorities?

## THE TREATMENT OF PERFORATION IN TYPHOID.

BY F. E. HARE, M.B., BRISBANE HOSPITAL.

INTESTINAL perforation, during the course of typhoid fever, occurs at two different periods, and as the result of two distinct pathological conditions.

1. At the end of the second, or beginning of the third week during the separation of the sloughs. Here the perforation is almost always of large size, and may indeed correspond to the greater part of a Peyers patch. It is caused by the necrotic process having involved the whole thickness of the intestinal wall.

2. Later in the disease, at the end of third or during the fourth or fifth week or more. It is then due to progressive ulceration in the floor of the ulcer; the aperture is always minute.

Both varieties of the accident are, of course, usually fatal, but a distinction should be drawn between them. Early perforation, of necessity accompanied by escape of intestinal contents in considerable quantity, rapidly terminates in death. With perforation occurring in the later stages of the disease it is not necessarily so. The process is comparatively slow; peritoneal adhesions have time to form to some extent before the accident actually happens, and the amount of faecal matter effused is at first, anyrate, often very minute. Should the gut at this time be subjected to any sudden strain, rapid effusion of its contents will occur, and the further course of the case will be the same as in the first variety of perforation.

These steps in the process are not fanciful, but can frequently be recognized clinically where the patient's mental condition remains clear. A sudden pain, localized in one part of the abdomen, followed in a short time by tenderness and hardness limited to the same area; next an attack of vomiting, increased abdominal pain, and then all the signs of acute general peritonitis.

It would seem, then, that in anticipating the occurrence of vomiting lies the only chance of successful treatment. The following is a case in point:—

A. W., a married woman, *æt.* 29 years, was admitted into hospital on April 21st—the twelfth day of the fever. The further course of the disease was that of a moderate, but very prolonged attack of typhoid. On the 27th of May, however—the forty-eighth day of the fever—she suddenly awoke at a quarter to five a.m. complaining of intense pain in the right iliac region. Morphia gr.  $\frac{1}{2}$  was given hypodermically. A few hours later there was marked tenderness, hardness,

and complete absence of movements of respiration over the seat of pain. The right thigh alone was flexed. In addition, the voice was altered in quality, and the pulse—which had previously ranged between 110 and 120—rose to 140, and later to 164, becoming at the same time small and hard.

All food by the mouth was stopped, a small piece of ice to suck being occasionally allowed. An enema, containing brandy, milk digested with "Zymine" and Carnrick's beef peptonoids, was administered every three hours. The patient was kept well under the influence of morphia, and to do this it was found necessary to give gr.  $\frac{1}{2}$  hypodermically about every 2 or 4 hours, night and day. This treatment was pursued for three days, at the end of which time a few teaspoonfuls of chicken broth, were allowed by the mouth, and the following day a little iced champagne. Vomiting never occurred, and the symptoms of peritonitis gradually subsided. On the 13th of June she was apparently convalescent, and on the 17th was removed to a couch for the first time. Unfortunately, however, later on severe diarrhoea set in, and she died greatly emaciated on the 6th of July.

At the autopsy, there was found inflammatory redness, with superficial ulceration of the sigmoid flexure. This, probably, accounted for the fatal diarrhoea. Just above the ileo-cæcal valve, the ileum, for about two inches of its length, was firmly bound down to the iliac fascia by a mass of adhesions, completely organised. On opening the gut a small depression was found on the mucous surface, probably corresponding to the perforation, and opposite which the adhesions were especially dense—no sign of peritonitis elsewhere. The scars left by the typhoid ulcers were plainly visible, but the whole mucous surface of the small intestines was otherwise normal.

The next case illustrates some additional points in the treatment of perforation.

Jane C., single, *æt.* 23 years, was admitted on the tenth day of the fever. For the next fortnight all the symptoms were very severe, more especially the diarrhoea and meteorism. On the twenty-fourth day perforation occurred at 6 p.m., as evidenced by the sudden onset of pain in the right iliac region, rapidly followed by tenderness, hardness, and the abolition of respiratory movements over the lower half of the abdomen. The same treatment as in the other was adopted, nothing whatever being allowed by the mouth. The pulse, however, continued to rise, and the abdomen became greatly distended. Forty-eight hours after the accident, the transverse color was punctured with the aspirator needle, and a large quantity of gas allowed to escape. On the



following morning, however, the patient's condition was as follows:—Abdomen, and especially the transverse colon, enormously distended; vomiting, or rather regurgitation of bilious fluid, and hiccough, constant; surface of body covered with cold sweat; face and extremities bluish; pulse, small and feeble, about 160 in frequency. The colon was again punctured, this time in two places, and with the happiest results—retching, hiccough, and cold sweats immediately ceased; the normal color and expression returned to the face, and the pulse fell at least 30 beats a minute, becoming at the same time distinctly larger and stronger. During the next two days the colon was punctured many times, in fact as often as it showed any tendency to become distended. Vomiting did not recur, and the symptoms of peritonitis gradually subsided.

On the 29th day of the fever, and the 6th from the occurrence of the accident, they had, in fact, disappeared. The abdomen was soft and free from tenderness; the pulse 112°, but large and full, and she was, for the first time, allowed a little thick nourishment by the mouth. Unfortunately, next day, she expressed a desire for the bed-pan, which through a mistake, was allowed her. During the attempt to use it she was seized with all the symptoms of perforation for the second time. General peritonitis ensued, and she died in about thirty-six hours.

At the autopsy the exact seat of the original perforation could not be distinguished, on account of the matted condition of the coils of the intestine. It was, however, no difficult task to discriminate the partially organised adhesions—the remains of the first attack of peritonitis—and the semi-purulent lymph due to the second. No trace of the punctures could be seen in the colon.

In this case, it seems reasonable to suppose, that the patient might have recovered, had the action of the bowels been deferred for a few more days, when the adhesions would have been stronger. Instead of being encouraged, the desire to unload the rectum should have been immediately suppressed by morphia hypodermically.

Another point of great interest in this case is the direct causal relation between the abdominal distention and the signs of cardiac failure, and other serious symptoms. That the alarming condition of the patient was mainly due to the mechanical "crowding" of the heart was placed beyond a doubt by the immediate result of the puncture. Usually, of course, meteorism can be treated by enemata and the application of ice and pressure externally, but when accompanied by peritonitis—in all probability the result of perforation—such measures are inadmissible, as they all, in one way or another, increase for the time the

strain on the gut. Even the passage of the rectal tube is often sufficient to induce an action of the bowels, accompanied by a reflex contraction of the abdominal muscles, quite sufficient to cause extravasation of the bowel contents.

Under such circumstances, puncture is a most valuable method of treatment; it is, in point of fact, our only safe resource, and though I have used it on many occasions, I have never seen any but good results.

### A CASE OF DEATH FROM ANÆMIA DUE TO THE ANKYLOSTOMUM DUODENALE.

READ BEFORE THE MEDICAL SOCIETY OF QUEENSLAND.

By JAMES B. HOGG, L.R.C.P. ET R.C.S.,  
EDIN., ASSISTANT MEDICAL SUPERINTENDENT  
WOOGAROO LUNATIC ASYLUM, GOODNA.

P.C.C., AGE 36, single, labourer, native of Denmark, was admitted to the asylum from Clermont in December, 1878.

He was suffering from mania which gradually passed into secondary dementia. He was quite unable to give any account of himself, and never made any complaints as to his health. He was very dirty in his habits, passing his urine and feces into his clothes, filling his ears and nose with pebbles, threading bits of wire through his nails, etc. He habitually swallowed large quantities of stones, and on one occasion when he had to be closely watched in order that we might recover two keys which he had snatched from asylum attendants, we found in his motions, besides, stones, etc., the two keys, a penknife, and the bowl of a pipe with  $\frac{3}{4}$ -inch of stem.

On 15th June, 1885, his feet and ankles were found to be cedematous, but his heart seemed right and his urine was free from albumen.

On 21st September he is reported "well again."

On 10th January, 1886, his feet, legs, and eyelids were noticed to be cedematous, and his urine contained a trace of albumen.

By 10th March he had again recovered.

On 15th October, 1888, he was seen to be thinner and paler, and by the 5th November he had become very anæmic and generally dropsical. His urine was clear, watery, sp. gr: 1.005 acid, and contained about one-twelfth of albumen. Tube casts were not looked for.

Thenceforward he lay in bed in a condition of gradually deepening anaemia and anasarca, dying on the 8th December, 1888.

His treatment consisted in the administration of iron, especially tr. Ferri perchloride.

A *post mortem* examination was made the same afternoon. There was general anasarca with puffing of the face and eyelids. The mucous membrane of the eyelids and mouth was of the same tint as the adjacent skin. The pleural, pericardial, and peritoneal cavities all contained much serous fluid. Heart, lungs, and liver all appeared anaemic but healthy. The kidneys, in which we expected to find a recent inflammation ingrafted on a chronic condition, were also healthy. The stomach showed signs of chronic catarrh, and in the duodenum and upper part of jejunum were 30 or 40 minute worms, each about  $\frac{1}{2}$ -inch long, adherent by one extremity to the mucous membrane as I now show you. They were alive and wriggled about. When detached from the duodenal mucous membrane, they left small bleeding points. A quantity of dark brownish matter and also much blackish, shreddy material suggestive of blood was washed out of the intestines. Under the microscope, with a low power, the worms were recognized as specimens of the *Ankylostomum Duodenale*, and found to be of two kinds—male and female. The male worm has a peculiar and characteristic lobular arrangement at its caudal extremity. The female worm has a truncated cone-shaped head, and four teeth in a large, cup-shaped mouth. They appeared to me to be filled with small moving worms, probably embryos. Most of these points can be observed in the specimens I now shew you. The male worms are less plentiful than the female as in picking some off the duodenum for preservation, I got three males to 15 females. The worms are extremely tenacious of life; some were wriggling about under the microscope six hours after the patient's death, and I noticed them coiling and uncoiling for some time after being put in a 1 per cent. preserving solution of perchloride of mercury. Many of the worms were bright pink from recently-ingested blood. Under the microscope a male worm ejected a large mass of nucleated granular multiform cells—sperm? On inserting under the cover glass a few drops of a 2 per cent. alcoholic solution of santonin, the animal at once shrivelled, became opaque, and vomited much granular blood pigment.

I may add a few particulars gleaned from various authorities as to the parasite and its effects.

It was discovered in Northern Italy in 1838, and has since been found in France, Holland, Germany, Comoro Islands, Cayenne, Jamaica, Java, Egypt, and Brazil. In the two latter countries it is very common. I believe this is the first time it has been found in Australia.

It is the cause of a form of anaemia which, unless properly treated, is a very fatal disease. The anaemia is due to loss of blood caused by the worms, which act like leeches. "The quantity of blood lost is not confined to what the worms abstract directly from the body for their sustenance. For it would appear that they now and then change their position, and that the wound which they leave behind them, which closely resembles the bite of a leech, is the source of constant slight hæmorrhage."—(Heller).

An account of a fatal outbreak due to *Ankylostomata* among the workers at the St. Gotthard tunnel will be found in the *British Medical Journal* of 12th March, 1881. Another epidemic among brickmakers in Holland is related in the *Lancet* of 19th June, 1886.

The worm gains admittance to its host through food or drink or materials used in work. For example, in the epidemic among the brickmakers the moist clay they were using was found to contain the ova of the *Ankylostomum*.

The diagnosis of its presence must rest upon the careful exclusion of other causes of anaemia. In the above detailed case we believed we had to deal with a form of kidney disease. The fact of anaemia being epidemic would probably make one suspect the true cause, and lead to a search in the fæces for the worms or their embryos or ova.

The treatment to expel the worm, advised by those who have had experience, varies. In Brazil they get "the best results" from the use of the fresh pulp of the Gammeleira, or *Ficus Doliaria*. (Wucherer). In Europe "Ethereal extract of male fern followed by santonin" caused "perfect restoration to health." (Perroncito). "Santonin with calomel" caused "evacuation of the *Ankylostomum* in large numbers." (Bugnion). Lutz advises "large doses of thymol after a previous clearing out with calomel and senna," and "this brought away large numbers of the entozoa even where the male fern had been previously administered.

Drawings of the *Ankylostomum* may be seen in Quain's Dictionary in the article *Sclerostoma*, in Cobbold's parasites, page 212, and in Ziemssen's Encyclopædia, vol. vii., page 777.

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REDUCTION OF POSTAGE ON BOOK PACKETS FROM SYDNEY TO QUEENSLAND.—Members of the profession in Queensland who are in the habit of getting their books from Mr. Bruck, in Sydney, will be pleased to learn that the postage on book-packets from Sydney to any part of Queensland has been reduced from 4d. to 1d. for every four ounces.

## REPORTS OF SOCIETIES.

## MEDICAL SOCIETY OF QUEENSLAND.

MONTHLY Meeting held January 8 at 8.30 p.m., in the School of Arts, Brisbane. Present: Drs. Thomson, Hill, Little, Gibson, Lyons, Booth, W. S. Byrne, E. H. Byrne, Hare, Tilston, Shout, Mellish, and Love. Visitors: Drs. Germont and Loir (M. Pasteur's representatives).

DR. GIBSON showed an interesting case of rupture of the crystalline lens caused by accident.

DR. LYONS showed some fine specimens of daughter cysts taken from a hydatid tumour of the liver.

DR. LOVE showed under the microscope some living embryos of *Filaria sanguinis hominis* taken from a girl aged 14; also, chylous urine from the same patient.

The question of registration of nurses was again brought forward, and a committee, consisting of Drs. Hill, Tilston, and Love, were appointed to arrange matters and insert the necessary advertisements.

DRS. EDGELOW (Lutwyche) and Comyn (Red Hill) were elected members of the society.

DR. W. S. BYRNE then read his paper on "The Uses of Electricity in Certain Forms of Uterine Disease," which will appear in our next issue.

DR. HARE followed with a short paper on the same subject, giving the results of the treatment in his hands.

A discussion followed, in which Drs. Little, Love, Gibson, Hare, and Byrne joined.

DR. THOMSON proposed, and Dr. Little seconded, that Drs. Germont and Loir be made honorary members of the society during their stay in Brisbane. Carried unanimously.

THE PRESIDENT informed the members that the Medical Board was preparing a new Medical Bill for presentation to Parliament. After discussion, it was thought that if the draft bill could be submitted to the society for consideration it would be very desirable.

THE SECRETARY read a letter from Trackson Bros., electricians, stating that they purposed erecting a battery for Apostoli's treatment, and bringing the same under the notice of members.

## MEDICAL APPOINTMENTS.

- Abramowski, Otto Louis Moritz, M.D. Berl., to be an Officer of Health for the shire of Swan Hill, Vic.  
 Badie, John McIntyre, M.B. of Ch. M., Glas., to be Health Officer for city of Sandhurst, Vic.  
 Hill, Alfred William, M.R.C.S., Eng., L.R.C.P., Lond.; M.D., Brux.; to be a Surgeon in the S.A. Volunteer Force.  
 Hill, Charles Herbert, M.B. Melb., to be a Junior Deputy Medical Superintendent of the Hospitals for the Insane, Vic.  
 Jeffreys, James Graham, L.S.A. Lond., to be Public Vaccinator for district of Mount Benger, N.Z.  
 Kennedy, John Timothy, L.R.C.P. & R.C.S., Edin.; L.F.P.S., Glas.; to be Health Officer for the district of Cobram, Vic.  
 Mackenzie, Murdoch, L.R.C.P. & R.C.S. Edin., L.F.P.S. Glas., to be Health Officer for shire of Dimboola, Vic.  
 Montgomery, John Park, M.B. & Ch. B. Melb., to be Health Officer for the shire of Woorayl, Vic.  
 Murray, John James Goodlatte, L.R.C.P. & R.C.S. Edin., to be Govt. Medical Officer, and Vaccinator for the district of Parkes, N.S.W.  
 Nesbet, Walter Blake, M.B. of Ch. M. Edin., to be a Surgeon in the Queensland Defence Force.  
 Parker, Alfred Henry, L.R.C.P., Edin., to be Public Vaccinator for Beechworth, Vic., vice Dr. H. T. Fox, resigned.  
 Prangst, Lionel Francis, M.B. of Ch. B. Melb., to be Assistant Resident Medical Officer of the Midwifery Department of the Women's Hospital, Melbourne.  
 Ross, William Chisholm, M.B. of Ch. M., Melb., to be Health Officer for shire of Dimboola, Vic.  
 Swayne, Herbert Wigan, M.R.C.S., Eng., to be Govt. Medical Officer, at Dalby, Qu.

## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castle-reagh Street, Sydney.*

AUSTRALASIAN  
MEDICAL GAZETTE.

SYDNEY, FEBRUARY 15, 1889.

## EDITORIALS.

## FEDERAL QUARANTINE.

A FEDERAL System of Quarantine, as we have so frequently argued, is the only safeguard we possess against epidemic disease. The commercial relations between the colonies and Europe and the East are increasing with marvellous rapidity, and the traffic, consequent on this increase is proportionate, equally so is the danger of importing infectious disease. Periodically there are scares of small-pox or cholera at one or other of our Australian capitals, and thousands of pounds are spent in quarantine and other means of eradication; then governments wake up and bestir themselves, but no sooner has the foe been defeated than all relapse into their former somnolent condition. All the talk of what should be done, how it should be done, and who it should be done by is dropped, and we are left exactly in the same state of unpreparedness as we were before. Some day an epidemic will appear and assume such proportions as will not yield as in the past to measures of eradication, and then a permanent centre of contagion will be established as in European countries. No money, no measures of precaution will then avail, for no eradication will be possible no matter how much money be lavished on it. The various colonies have spent thousands of pounds on defence forces to protect their properties against an enemy's attack, in some of them, however, with little wisdom. Surely a small proportion of expenditure might be devoted to adequately protect the lives of the inhabitants against an enemy that has already knocked more than once at our doors, and which must obtain admission if the laws of quarantine are not made sufficiently exact and binding on all colonies alike. It seems to us that some

few of the main points to be considered in any Federal System of Quarantine are as follows:—All Quarantine should be performed at the initial port of call, and thus avoid the creation of any fresh centre of contagion. All fumigation and disinfection should be there carried out. The drafting of the infected from the non-infected should be most rigidly supervised, and the prevention of communication between the sound and diseased, by means of separate compounds, most strictly enforced. All Quarantines should be performed under the personal observation of a Government Medical Officer, who should himself be subject to Quarantine. The Quarantine stations should be buildings constructed entirely of iron, and should be thoroughly disinfected after each Quarantine. The bodies of those dying from infectious disease in quarantine should be buried at a fixed minimum depth, or what would be better, cremated. Quarantine Stations should, where practicable, be situated on islands, at some distance from the main-land. There are many other points in Federal Quarantine which we have already touched in previous articles; but it is not so much as to what the provisions of a Federal Act should be that we wish to call attention in the present one, as to impress on the mind of our readers the necessity and urgency for prompt action.

#### EXTRAORDINARY ADVERTISEMENT OF THE THAMES (N.Z.) HOSPITAL BOARD.

AN extraordinary course has been taken by the Board of the Thames Hospital, New Zealand, in advertising in the local papers that advice and medicine may be obtained at the hospital on payment of five shillings, by applying to the House Surgeon. If the board receives the proceeds it is acting unjustly to the House Surgeon, whilst if a portion is paid to and accepted by that officer he has but little *esprit de corps* when he prostitutes his profession in such company. A hospital is supported by the Government and well-to-do colonists for the aid of their poorer fellows who are not in a position to pay the fees to which a medical man is entitled for his services, and not for the sale of such services to persons able to pay a reasonable fee.

This is a singularly indecent instance, and whether the advertisement is published by the Hospital Board for its own aggrandisement with the House Surgeon as its facile tool, or by the former at the instance of the latter, we can only hope that if a sense of propriety on the part of the offenders does not end it voluntarily, public opinion will be so expressed as to compel them to do so.

## LETTERS TO THE EDITOR.

### THE HOSPITAL SYSTEM IN AUSTRALIA.

(To the Editor A. M. Gazette.)

SIR,—The January number of the AUSTRALASIAN MEDICAL GAZETTE contains an editorial on "The Hospital system in Australia."

Whilst thoroughly agreeing with the two main propositions advanced therein, viz., that the election of Resident Medical officers should be taken out of the hands of the lay Committee of Management, and that one or more medical men of experience should be appointed as Hospital Inspectors for each colony, I wish to point out some other incongruities of the hospital system in vogue in these colonies, which not only strike the newly-arrived medical man as absurd, but also threaten to seriously affect the rising and future generations of Australian practitioners, unless the various Governments exercise their authority in bringing about a new order of things.

In three Australian colonies, New South Wales, Victoria, and South Australia, there are flourishing medical schools, which are either now annually turning out large numbers of qualified men (as in the case of Melbourne University), or will shortly be doing so. Now it will scarcely be disputed that the great object of every newly fledged graduate in medicine is to obtain a hospital appointment for a year or two, in order that he may acquire that practical experience of his profession, and readiness of resources in emergencies, without which he is heavily handicapped for many years of his after life. This hospital experience is all the more a necessity in colonies like these, where most junior practitioners commence work in remote country districts, where in many cases they are separated from their nearest medical confrère by a great distance, and are thus debarred from the professional assistance and advice which is always at hand in the large centres of population. How is it possible, under the present system of unlimited tenure of office by resident officers of hospitals that any opportunity can be afforded our Australian graduates to obtain this much desired and necessary practical work? The only institution, so far as I know, that has recognised this want is the Melbourne Hospital, where the appointments are for a year only, with the privilege of renewal under special circumstances for another year, and where the appointments are given to candidates in accordance with their position on the honour list at the final examination. This institution thus provides for four out of the many aspirants annually.

There are many large hospitals in the colonies (I refer to those which accommodate over 100 in-patients, and with out-door departments averaging from 500 to 800 per week) where the gross injustice is perpetrated of giving the whole medical management to one highly-paid man, who may remain, and has remained, for an indefinite period, in fact, till he dry-rots, so long as he "keeps in" with the lay committee. These hospitals have honorary visiting staffs, whose names appear on their annual reports, and who have to subject themselves at stated intervals to election by the vacillating votes of the subscribers; but whose position, so far as any authority exercised by them over the resident or the patients, is, in most instances, a farce.

The objections to such a system are both manifest and manifold. In the case of the larger institutions it is quite apparent that a large number of in and out-patients cannot meet with the individual interest and

attention at the hands of one man that they would if there were three or four residents to divide the work. Also that far greater interest would be taken in their cases by the honorary staffs if they had the entire direction of the treatment, which should be carried out by the resident officers, except in emergencies. And, most important of all, where there were several residents, the hospital case records could—and should by law—be so kept that the present and future generations of the profession and the public might benefit by the vast amount of experience that has during the past gone to waste. It will naturally be asked, how are these defects to be remedied?

I would suggest that the tenure of all hospital appointments should be limited thus:—

In hospitals of 25 beds, 5 years tenure, 1 resident.				
" 25-50 "	4	"	"	1
" 50-75 "	3	"	"	2
" 75-100 "	2	"	"	2
" 100-150 "	2	"	"	3
" 150-200 and over, 1 year's tenure, }				
four or more residents.				

It should be the rule that the appointments in all our hospitals, when vacant, should be given to colonial graduates before others, and of these when there should be more than one applicant, the one who had passed the best examination should have the preference.

There is a country hospital in Victoria worked upon a plan which I am informed gives satisfaction to all concerned. The three or four medical men in the town divide among themselves the salary formerly paid to a resident, and take week about to attend to the hospital patients. They thus act as an efficient vigilance committee against the admission of improper patients, preserve professional amity towards each other, and reap the full benefit of the medical and surgical experience of the hospital, whilst the patients have the advantage of their united skill whenever occasion demands it. I fancy that this plan would work well in most small country hospitals, and have therefore mentioned it.

The objection might be raised that you could not get applicants for the smaller country hospitals for a limited term of five years. My own belief is that there would be plenty. But if not they could be efficiently worked upon the plan just quoted. It is also questionable whether a man of any professional worth would care to remain longer than that period at the remuneration usually offered. But it may again be argued that these men do not remain for the salary, quarters, &c., but for the additional emoluments received from private practice. I may at once reply to this, that I know of no greater curse to the profession than the system so long in vogue in these colonies of committees either openly permitting or quietly winking at resident officers of public institutions practising privately. In all towns which boast of a hospital there are always one or more practitioners besides the hospital resident. Whether through the influence of the committee who have, under our system, elected him, and who are naturally men of weight in the locality; or whether, by a curious hallucination on the part of the public, the hospital resident—at any rate whilst he remains the resident—is always exalted to the pinnacle of professional fame. The other practitioners are, in most instances, men of more experience, and of equally good, or better, qualifications, have to keep up establishments, horses, traps, &c., on the emoluments received from the local friendly Societies, and the fag ends of private practice, which do not go to the hospital resident. The result being that some, through idleness, take to drink, and that really good men go away, rather

than fight against such professional odds. It is no uncommon occurrence to hear the inhabitants of these districts complain that they cannot get a good man to stay with them, and I have had to tell such complainers that whilst they allow their hospital resident to monopolise the cream of the private work, they can expect nothing else.

Let, then, the Australian graduates in medicine, in conjunction with their respective University authorities, demand that their governments shall insist on some such reforms, as above sketched out, being introduced at the various colonial hospitals. The governments can achieve the end desired without any difficulty, by insisting that such reforms be a condition for receiving the Government grants. For the rest, common sense and the desire to do justice to our Australian graduates in medicine, will sufficiently influence public opinion in the cause.

Yours, &c.,

"HOSPITAL REFORM."

#### BERLIN AS A "MEDICAL CITY."

To the Editor of The Australasian Medical Gazette.

SIR,—Knowing that it must be of interest to every member of the profession to become acquainted with the "medical" capacities and facilities of a large city, I give herewith, in the shortest possible manner, a sketch of Berlin as a centre of medical science. The material before me is so large that I must be satisfied to mention the principal points only, without much comment. Let us begin with the University, which, like every University in Germany, is a State institution.

The Berlin University (*Friedrich Wilhelm's Universität*), has at present in its medical faculty 18 ordinary professors, receiving State salary; 29 extraordinary professors, and 59 lecturers, so-called "Privat Dozenten." While the purely theoretical instruction is conducted within the building of the University itself, which is rather insufficient in its interior arrangements the practical teaching takes place at the different hospitals, clinics, polyclinics, State and private sanitary institutions, all of which are in connection with the University. During the present winter 1697 medical students have been "immatriculated," the total number of students being 6103.

Independent of the regulations and arrangements of the University, yet still connected with the benefits of the same is "*Das Königliche medizinische und chirurgische Friedrich Wilhelm's Institut*," at which the students (so-called *Elèves*), are entirely educated at the expense of the State, receiving also free lodging, light, fire, and a certain monthly pecuniary allowance. The aim of this institute has a military character, developing practical military surgeons, who pledge themselves to serve in the army at the end of five years' effective studies for eight years, of course with adequate officer's rank and officer's pay. Some of the greatest men of science in Germany—such as Helmholz, Virchow, Langenbeck, and others—have had their training at this institute. The number of the *Elèves* is limited to 200.

The principal practical school of medicine and surgery, and intimately connected with the above-named establishments, is "*Die Königliche Charité*," a hospital of grand dimensions, with clinical and other teaching arrangements in every branch, being also connected with the Pathological Institute. It has 1,900 beds, which are always occupied with patients. The

professional management is conducted by 13 senior surgeons (the words surgeon and physician have one meaning only in Germany, for the qualities and the degrees of both go always together), by 29 junior surgeons and 27 assistant surgeons. There are, besides, four chemists, three clergymen, 14 administrators, eight inspectors, and more than 400 nurses, including female nurses. The average number of yearly patients is 22,000.

Second in size, but not second in importance as a medical school is "*Das Königliche Klinikum*," composing a surgical, an eye and an ear department. Although having fewer beds than the Charité, the number of patients is, nevertheless, much larger, because here they are treated not only stationary, but poly-clinically as well. The late Professor Langenbeck was the head of the surgical department, which is now in the hands of Professor Bergmann, while Professor Schweigger is conducting the ophthalmic, and Professor Lucae the aural clinic. Somewhat over 12,000 patients were treated in the ophthalmic department alone during the last year.

A third important institution to the medical student is "*Die Universitäts Frauen-Klinik*" (Professor Olshausen, successor to the late Professor Schröder). The building of this exclusively to female complaints devoted establishment was erected at a cost of 3,000,000 marks.

The Physiological Institute, the principal of which is Professor Dubois-Raymond, has four sub-departments:—

1. The microscopic-biological.
2. The chemical.
3. The physiological.
4. The physical-physiological.

Further mention must be made of the *Pharmacological Institute* (Professor O. Liebreich), the *Hygienic Institute* (Professor Koch), with a special bacterioscopic department, and the *Forensic Institute* (Professor Liman), the yearly autopsies at which number more than 800. Lastly, although it should have been mentioned before as a principal branch of medical education, is the *Anatomical Theatre* (Professor Waldeyer), at which about 600 students are constantly engaged in anatomical researches. The large hall of dissection is thus prettily characterised: *Hic locus est, ubi mors gaudet succurrere vitae.*

Other State institutions are

- (a) The Imperial Health Office, appointed members of which live in every large German city;
- (b) The Medical Department in the Ministry of the Interior, at which five privy-councillors (medical men), have to report about everything concerning sanitation.
- (c) The Institution for the Blind, and
- (d) The Institution for the Deaf and Dumb.

The following are city establishments, but also, more or less, in connection with the University teaching:—

1. *Hospital at Friedrichshain* (700 beds) the original cost of which was 4,718,500 marks. At both sides of the principal building, in three different groups and widely separated from each other are 12 pavilions; 4 two-stories with 75 beds each for in-patients only; 2 two-stories with 64 beds each for surgical cases. There are also 2 one-story isolated pavilions for contagious diseases with 44 beds each, and one special pavilion for diphtheritis with 26 beds. Each pavilion is a little hospital in itself, having separate dwelling-rooms for surgeons, nurses, etc. The construction of the pavilion for surgical operations is entirely made of glass and iron.

2. *City Hospital Moabit*, with 24 barracks of 30 beds each. It is specially constructed in view of contagious epidemics, and in accordance with this view principal

attention has been paid to the system of disinfection, which is conducted by steam. A separate bacteriological laboratory is connected with this hospital.

3. *City Asylum at Dalldorf*. Pavilion system. The asylum has room for 1,200 persons, but it is by far too small for the demand. Over 1,000 patients are, therefore, constantly cared for in private asylums at the expense of the city.

4. *Bethanien* (a Diakonissen House of 354 beds) principally for surgical cases.

5. *Augusta Hospital* (240 beds) also principally for surgical cases. Barrack system.

6. *Jewish Hospital* (140 beds), connected with some grandly constructed pneumatic cabinets, a legacy of the late Professor Traube.

7. *St. Hedwig's Hospital* (a Roman Catholic Institution with 280 beds). The private rooms are very elegant and comfortable, and accordingly rather expensive. It has 52 different apartments for patients.

8. *Lazarus Hospital* (150 beds), with special advantages for small children and a good school for nurses.

9. *Elizabeth Hospital* (288 beds), 105 sisters of mercy (Diakonissen) are connected with the same.

10. *Elizabeth Children Hospital* (190 beds). Another "Children Hospital" is in erection at a grand scale, in memoriam to the late Emperor Frederick.

Nearly all the hospitals are situated in open places, and are surrounded by large gardens. Besides those mentioned there are a large number of private hospitals in Berlin of every description and for every specialty. Some of these are very extensively arranged. There exist also 58 private poly-clinics, 11 of which are exclusively devoted to diseases of the eye, and eight exclusively to diseases of the ear.

Having thus mentioned the principal Medical and Sanitary Institution of Berlin, it may be opportune to mention also the different societies of the medical fraternity, the names of which I give here in translation for the benefit of the English reader:

1. Berlin Medical Society.
2. Society for Internal Medicine.
3. Society for General Medical Science.
4. German Society for Public Health.
5. Gynaecological Society.
6. Society of Physicians, connected with the Charité.
7. Berlin Military Surgical Society.
8. German Society for Surgery.
9. Society of Official Medical Men of Prussia.
10. Hufeland's Medico Surgical Society.
11. Berlin Dental Society.
12. Society of Physicians to the Friendly Societies.
13. Society of Physicians to the City Districts.
14. Medical Protection Society.
15. Benevolent Society to support indigent members of the faculty.
15. Central Benevolent Society to support indigent families of deceased medical men.

At present there are somewhat over 1500 medical men practising in Berlin, which means one medical man to nearly each thousand inhabitants. Berlin seems to have a special attraction to members of the profession, who sooner live in moderate circumstances within its walls than outside the same in better circumstances. It certainly cannot be said that the capital of the German Empire is more unwholesome than other large cities. On the contrary, in some comparison it is less unwholesome. During the week ended Nov. 10, 1888, the proportion of deaths was 19.4 to each 1000 of the total population (1,563,706). In other large German cities the mortality for the same week, and in the same propor-

tion, reads thus:—Aachen 16,<sup>0</sup>, Altona 20,<sup>5</sup>, Barmen 10,<sup>3</sup>, Bremen 11,<sup>1</sup>, Breslau 26,<sup>0</sup>, Chemnitz 25,<sup>4</sup>, Danzig 31,<sup>5</sup>, Dresden 16,<sup>7</sup>, Düsseldorf 24,<sup>5</sup>, Elberfeld 20,<sup>3</sup>, Frankfurt 13,<sup>0</sup>, Hamburg 19,<sup>3</sup>, Hannover 13,<sup>3</sup>, Köln 21,<sup>7</sup>, Königsberg 27,<sup>0</sup>, Leipzig 19,<sup>8</sup>, Magdeburg 18,<sup>3</sup>, München 25,<sup>3</sup>, Nürnberg 19,<sup>1</sup>, Stettin 19,<sup>6</sup>, Strasburg 19,<sup>0</sup>, Stuttgart 14,<sup>6</sup>. In non-German cities:—Amsterdam 16,<sup>9</sup>, Buda-Pest (previous week) 25,<sup>0</sup>, Dublin 27,<sup>5</sup>, Liverpool 21,<sup>5</sup>, London 18,<sup>5</sup>, Paris 22,<sup>0</sup>, Petersburg (previous week) 21,<sup>5</sup>, Warschau (previous week) 27,<sup>5</sup>, Wien (previous week) 22,<sup>0</sup>.

The following cases of contagious diseases were reported in Berlin during the same week:—27 typhus, 207 measles, 96 scarlatina, 98 diphtheria, 2 puerperal fever.

Although one week's statistics certainly cannot give an absolute knowledge of the sanitary condition of a town, it may nevertheless give such knowledge in the abstract. In the three weeks previous the mortality in Berlin was respectively 17,<sup>2</sup>—19,<sup>5</sup>, and 21,<sup>6</sup> (: 1000).

One reason why German medical men prefer Berlin to any other city is probably the facility with which scientific researches of every description can be accomplished in the capital of the Empire. All scientific and sanitary institutions, such as Hospitals, clinics, laboratories, libraries, museums, etc., are open the whole year round to those who have a wish and a right to make use of the same. A further advantage (which at the same time is a great disadvantage to other universities in the fatherland) is the concentration in Berlin of the most eminent men, who stand first in Germany as physicians (resp. surgeons), teachers, and investigators in the different branches of medical science. Another attraction is, doubtless, the series of lectures and demonstrations which are given for the benefit of guaranteed professional men twice yearly, in the spring and in the autumn. These lectures (so-called "Curse") embrace the whole domain of medical knowledge and recapitulate and demonstrate everything, what has become new, and what is interesting. I have gone through such "Curse" six or seven times since I left the University, and I certainly did not expect to learn much in my favourite studies. Yet each time I found something to learn, and perhaps more to unlearn. I cannot express with words the delight one feels when some details of pathology, perhaps some complicated symptoms of rare cases, which may have puzzled one's mind for years, become—like a sudden revelation—clear and comprehensible! During the month of October and part of November 58 professional men, professors and lecturers at the University, held such private "Curse," all of which must have been well attended, considering that the five "Curse" which I attended were patronised by from 30 to 50 hearers. Amongst these I counted members of nearly all civilized nations of the world, including India and Japan. But I decidedly must complain about the insufficient space of the rooms in which most of the "Curse" are held. As a rule it is a room of ordinary size only, in which more than 40 persons, including a number of patients, are crowding for one hour at a time. The ventilation of such rooms is, in the winter months, insufficient, and the air in consequence often suffocating.

But no such complaint can be made in regard to the halls used by the medical students. Here the ventilation is perfect, as it is, in fact, in all state and city establishments which have been erected within the last twenty years. This applies principally to the public schools, in which special attention is paid to modern hygienic measurements. It would lead certainly too far and would expand the limits of a sketch, if I were

to go into details about all and every sanitary condition of Berlin and its suburbs. Probably the conditions are in the average here the same as in most other large cities. But it must be specially mentioned that in Berlin a wholesome idea has been developed about a rational hygiene in every department of public and private life. The system of canalization has improved the attractions of the town as such, and has improved the health of the people. No bad smells anywhere! The town is very clean, scrupulously clean. To every district an inspector of sanitation is appointed, who has to inspect regularly street by street, house by house. All police stations are provided with appliances in cases of emergencies; at each larger centre a physician is always present, to give, if necessary, first help. And many other items could be noted to prove that everything that rationally can be done for the sanitary benefit of the general public, is done in Berlin. Only those who have witnessed, and perhaps studied, the great strive, which, during the last two or three decades has made Berlin not only one of the most healthy, but also one of the most attractive cities of the globe, will appreciate the town accordingly and judge the same impartially.

I am, Yours, &c.,

B. SCHWARZBACH, M.D.

BERLIN, November, 1888.

#### MEDICAL ETHICS.

(To the Editor of the A. M. Gazette.)

DEAR SIR.—I notice in your issue of January last a letter signed "FAIRPLAY," and your comments thereon. A very serious question is raised in the letter, and I fail to see that your reading in any way justifies the conduct attributed to "W."

Any person might quickly take advantage, and, simply asserting that the price demanded for a practice was unreasonable, according to your decision, would be justified in his most unprofessional conduct.

Again, I would like to ask, how many practices are sold for the exact sum at which they are first offered for sale? and are we to conclude that, if by chance, the vendor accepts a sum from a later applicant which is a little less than that offered to previous ones the purchaser is open to the persecution "FAIRPLAY" has named in his letter.

"FAIR PLAY" has, however, placed his case before you in a very meek fashion; he should have stated that "W" had some years previously acted as *locum tenens* for "N's" deceased predecessor. It should also be stated that "N" offered the practice to "W" for exactly the same sum, and on the same terms that "D" accepted subsequently, with slight alteration in favour of "N."

It resolves itself into the following, as far as I can see: "That one must be more than careful in offering a practice to a former *locum tenens* of a late predecessor, since nothing prevents him from settling in practice in the neighbourhood; he has, in fact, only to make you an offer far beneath the value of your practice, and he is guarded by the unrighteous law of medical ethics in his conduct.

Even if the terms accepted from "D" were less, I cannot see that "N" was obliged, or should offer the practice again to "W," unless the sum declined to "W's" idea of a reasonable price, "W" having once stated the price he was willing to give, the matter surely ended. As a matter of fact the terms subsequently accepted by "D" were far more advantageous to "N" than those first offered.

I am, Yours truly,

PLAY FAIR.

## THE MONTH.

## NEW SOUTH WALES.

DURING the year 1888, 266 children were admitted into the Sydney Hospital for Sick Children, making, with the 39 patients remaining from the previous year, a total of 305 patients under treatment; of these 229 were discharged, 36 died, and on December 31 last there were 40 remaining in the hospital. The number of operations performed was 97.

TWENTY-ONE applications have been received for the position of resident medical superintendent of the Sydney Hospital.

DURING the past year 79 patients were admitted into the Cobar Hospital as against 45 for the previous year. Sixty-six were discharged cured or relieved, five died, and eight remained in the institution.

ONE hundred and thirty one indoor and 200 outdoor patients were treated during the past year at the Forbes Hospital.

TWENTY-FIVE cases of typhoid have recently occurred at Balranald, two proving fatal.

It is our sad duty to record the death of Mr. Robert James Pierce, L. et. L. Med., R.C.S., Irel., 1864, an old and prominent resident of West Maitland, who died suddenly at his residence on January 23, at the age of 49. The deceased gentleman arrived in the colony in 1865, when he commenced practice at Muswellbrook. He afterwards removed to West Maitland where he practiced ever since, and at the time of his death he had acquired an extensive practice throughout the northern district. In public matters he was always a prominent figure for some years. He occupied a seat in the borough council, over which he presided as Mayor last year. He took an active part in the formation of the Philharmonic Society, and was an energetic office-bearer in the Northern Jockey Club and the Hunter River Amateur Turf Club. He was on the commission of the peace, and at the annual meeting of subscribers of the Maitland Hospital held recently he was unanimously elected president, and in addition he held the position of honorary consulting surgeon of the institution. He was very widely known and esteemed for his many good qualities and will be much missed from social and public circles.

MR. HENRY SHIELL, J.P., the City Coroner for Sydney, died on January 30. Mr. Shiell had filled the office of coroner since the year 1866.

DR. P. J. DROUGHT, late of Green Ponds (Tas.), has settled at Ivanhoe, 600 miles S.W. of Sydney.

DR. JOHN GIBSON, late of the Prince Alfred Hospital, Sydney, has succeeded to the practice of Dr. Hozier at Windsor.

Dr. A. L. HEALE, a new arrival, has commenced practice at Strathfield, a suburb of Sydney.

DR. W. ODILLO MAHER, hon. Ophthalmic Surgeon at the Sydney Hospital, has been granted six months' leave of absence to visit Europe.

DR. A. E. PERKINS, late of Hurstville, has been elected medical officer to attend to the miners of the Great Northern and Teralba Coal Companies.

ON January 20, at the Masonic Hall, Sydney, a banquet was given to Dr. H. J. Tarrant, Pro. Grand Master, by the United Grand Lodge of New South Wales, prior to his departure for Europe.

DR. W. H. TOFFT, a new arrival, settled at Corowa on the Murray River, 422 miles S.W. of Sydney, and 185 miles N.E. of Melbourne.

DR. A. WATSON, late of Orange, has commenced practice at Yass.

## NEW ZEALAND.

THE N. Z. Medical Association drafted a Bill recently for the regulation of medical practice in the colony, which was sent to the Government for approval. This has been given, but to the astonishment of the Association clauses have been introduced providing for each registered medical practitioner paying an annual fee of two guineas to the revenue.

THE death is announced of Dr. John Robeson Wanless, M.D. et Ch. M., McGill Univ., Canada, a homeopathic practitioner, formerly of Dunedin, and late of Wellington.

DR. J. EWART, resident surgeon of the Timaru Hospital for the last two years, has resigned, and is about to return to the old country.

DR. C. H. HAINES, of Auckland, has accepted the position of Honorary Consulting Physician to the Auckland Provincial Hospital.

DR. G. A. MORRIS, late of Fenwick, Ayrshire (Scotland), has settled at Maitaura, 107 miles S.W. of Dunedin.

## QUEENSLAND.

THE Queensland Medical Board notifies in the *Government Gazette* of January 12, that William Fetherstonhaugh, of Brisbane, having failed to produce the necessary papers, the Provisional License to practise medicine, granted to him by the Medical Board, has been cancelled, and his name removed from the Medical Register of Queensland.

AT the Etheridge District Hospital, Georgetown, 137 cases were treated during the past year, whilst only nine deaths occurred.

A spring of mineral water has been discovered at Tinana, near Maryborough: it has a slightly insipid alkaline taste, but it is not unpleasant.

A DULY qualified medical practitioner is wanted for the Walsh District Hospital, Montalbion, North Queensland. Salary £300 per annum, with right of private practice. Applications, together with qualifications, will be received on or before 13th March, 1889, by the Secretary of the institution.

A SURGEON is wanted for the hospital at Winton, in North Queensland; salary, £350 per annum. A large private practice might be secured, as there is no other medical man in the district. The committee will find Surgical Instruments for the use of the hospital. Applications to be in the hands of the Secretary, Mr. D. O'Keeffe, not later than Wednesday, 13th March.

## SOUTH AUSTRALIA.

A GOOD opening is said to exist for a resident medical practitioner at Millicent, in a wheat-growing district, 252 miles S.E. of Adelaide; any information concerning it may be obtained from Mr. Alexander Cassels, chemist, at Millicent.

## VICTORIA.

THE annual meeting of the Victorian Branch of the British Medical Association was held at the hall of the Medical Society, East Melbourne, on January 30, when Dr. T. Rowan, the retiring president, delivered an



interesting address. Dr. Fishbourne, of Moonee Ponds, was elected president for the ensuing year, and Dr. Le Fevre vice-president. Dr. George Graham, of Richmond, was elected an honorary member of the Branch.

THE Central Board of Health have decided that all lepers in the colony shall be removed to the quarantine station at Point Nepean, and placed under the supervision of Dr. Browning.

FOR the week ending January 19, 117 cases were reported to the Central Board of Health, 23 of which were fatal. The number of cases of typhoid fever reported during the week ending February 2, was 288, of which 28 were fatal.

THE Annual Report of the Committee of Management of the Melbourne Hospital, shows that the receipts for maintenance during the past year had amounted to £35,611 9s. 10d. This included the Government grant of £14,000, the centennial gift of £10,000, and £3,991 2s. 2d. from the Hospital Sunday Committee. The expenditure for the year had been £26,089 3s. 1d., but in addition to this a debit balance of £5,604 9s. 9d., which had been brought forward from the previous year, had been liquidated, and there was a credit balance in hand of £2,191 15s. 7d. During the year 20,851 cases had been treated in the institution. Of these 16,635 were out-patients, while 4,516 had been received into the wards of the Hospital. Of the latter 3,104 were discharged cured or relieved, 101 left as incurable and for other reasons, 746 died, and 265 cases still remained in the institution on the 31st December last. Of the fatal cases, 224 died within 72 hours of their admission.

A FEW old scholars, from Edinburgh, met in Melbourne, on January 12, presided over by Professor Anderson Stuart, of the Sydney University, when it was resolved to form an association to be called the Scottish Schools Union, the object being the meeting of the men of all professions who have received their education at any Scotch University or extra-academical school.

THE Central Board of Health have decided that the fees to be paid to medical officers for reporting cases of infectious disease should be 2s. 6d.

WE regret to have to announce the death of Dr. Eustace James Walshe, a colonist of 27 years standing, who died at his residence, Ryrie-street, Geelong, on January 21, at the ripe age of 73 years; the deceased gentleman was honorary consulting medical Officer of the Geelong Infirmary.

DR. JOHN CRUIKSHANK, M.D. Edin., L.R.C.S. Edin., 1827, died at Sandhurst on January 11, at the ripe age of 82. He had been a resident in the Bendigo district for over 30 years, and for many years acted as City Health Officer.

MR. WILLIAM SELWYN MORRIS, L.S.A. Lond. 1837, died at Avoca on January 26, from a general breaking up of the system, at the ripe age of 72 years. During his long residence at Avoca, where he settled soon after his arrival in the colony in 1862, the deceased gentleman made many friends and was highly respected by all classes.

GEORGE MAXWELL, L.F.P.S., Glas., 1859, late of Skipton, and George Wakefield, L.S.A., Lond., 1841, late of Kerang, are dead.

DR. W. M. CLAYTON, a new arrival, has settled at Sunbury, 24 miles N.W. of Melbourne.

DR. M. J. COHN, from Copenhagen, has commenced practice at Sandhurst.

DR. F. de B. GRIFFITH has removed from Balclava to Queenscliff.

## PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners, by the respective Boards:—

### NEW SOUTH WALES.

Smith, Thomas Orde, M.B. Dub., 1878; Ch. B. Dub., 1879; L. Mid. K.Q.C.P. Irel., 1878.  
Hull, Walter, M.D. Lond., 1887; M.R.C.S. Eng., 1882; L.R.C.P. Lond., 1882.  
Sergeant, George, M.R.C.S. Eng., 1881; L.S.A. Lond., 1882.  
Greville, Sampson John Roger, M.R.C.S., Eng., 1888; L.R.C.S. Edin., 1886; L.R.C.P. Edin., 1886; L.F.F.P. Glasg., 1886.  
Blackall, Patrick, M.D. Royal Univ. Irel., 1884; M.A.O. Royal Univ. Irel., 1885; M. Ch. Royal Univ. Irel., 1884.  
Cocks, Cambridge Cary, M.R.C.S. Eng., 1861; M.D. St. Andrew's, 1882; L.S.A. Lond., 1882.  
Heale, Alfred Lanson, L.R.C.P. Lond., 1888; L.S.A. Lond., 1888; M.R.C.S. Eng., 1873.

For additional Registration:—

Perkins, Alfred Edward, M. Ch. Sydney, 1888.

### NEW ZEALAND

Morris, George Alexander, M.B. & Ch. M., Glas., 1883.

### VICTORIA.

Clayton, William Mayne, L., 1876, L. Mid., 1883, R.C.S. Irel.; L.K.Q.C.P. Irel., 1883.  
Cohn, Michael Joel, M.D. Copenhagen; Staats Exam., 1874.  
Erson, Edward George, L. & L.Mid. R.C.P. Edin. 1876.  
Lewis, William Morrow, M.D. 1886; Ch.M. 1887, B. Univ. Irel.; L.Mid.K.Q.C.P. Irel. 1887.  
Toft, Walter Henry, M.B. & Ch.M. Edin. 1887.  
Harvey, John Thomas, M.B. & Ch.M. Edin. 1885; M.R.C.S. Eng. 1886.

Additional qualification registered:—

Bennet, Francis A., M.D. Aberd. 1888.

## BIRTHS, MARRIAGES, AND DEATHS.

\*.\* The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcement.

### BIRTHS.

ALLAN.—January 31, at Raymond Terrace, N.S.W., the wife of Dr. R. J. Allan, of a son.  
CAMPBELL.—On the 27th December, at Brisbane, the wife of J. Campbell, M.D., of a daughter.  
HARDIE.—On the 28th January, at Brisbane, the wife of David Hardie, M.D., of a son.  
JEFFERIS.—January 7, at Newtown (Sydney), the wife of Dr. Eddington Jefferis, of a daughter.  
PENNY.—On the 15th January, at East Melbourne, the wife of Henry J. Penny, L.K. and Q.C.P.I., &c., of a son.  
SPRINGTHORPE.—On the 16th January, at Melbourne, the wife of J. W. Springthorpe, M.D., of a daughter.  
TAYLOR.—On the 21st January, at Brisbane, the wife of W. F. Taylor, M.D., of a daughter.  
WIGG.—On the 21st December, at Norwood, Adelaide, the wife of Dr. Alfred Wigg, of a daughter.

### MARRIAGES.

SCANTLEBURY—BAYNES.—On the 8th January, at St. Martin's Church, Hawksburn, Dr. George J. Scantlebury, of Linton, Victoria, to Catherine Millington, youngest daughter of George Baynes, solicitor, Melbourne.  
WOOD—GRIEVE.—On the 15th January, by the Rev. Canon Acocks, William Cleaver Woods, M.D., Albury, to Margaret, fourth daughter of John Grieve, Bungwannah Park, Albury.

### DEATH.

HAMILTON.—On the 6th January, at Tandragee, Laura S. A., the daughter of T. K. Hamilton, M.D., aged 1 year and 7 months.

MR. BRUCK, Medical Bookseller, Sydney, has a few copies of the *Lancet* to spare from January 1, English date; Subscription at the rate of 45s. a year, postage paid to any of the colonies.

## REPORTED MORTALITY FOR THE MONTH OF DECEMBER, 1888.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
<b>N. S. WALES.</b>														
Sydney .....	132,846	268	195	97	...	4	2	...	3	21	13	8	4	1
Suburbs .....	215,849	789	392	218	5	7	12	...	23	33	32	23	7	8
<b>NEW ZEALAND.</b>														
Auckland .....	35,639	91	22	5	...	...	2	...	1	1	2	...	...	...
Christchurch .....	16,217	25	12	2	...	...	...	...	...	...	4	...	...	...
Dunedin .....	24,334	43	18	4	...	...	...	...	...	...	5	...	3	...
Wellington .....	28,235	78	26	7	...	...	...	...	2	...	4	...	1	1
<b>QUEENSLAND.</b>														
Brisbane .....	51,689	180	93	54	}	...	1	...	9	25	6	6	2	...
Suburbs .....	21,960	103	46	33										
<b>SOUTH AUSTRALIA</b> .....	312,100	726	338	152	...	...	18	...	9	37	26	21	9	1
Adelaide .....	43,527	92	73	24	...	...	1	...	4	5	10	8	1	...
<b>TASMANIA.</b>														
Hobart .....	31,926	64	49	18	...	...	...	...	2	7	2	3	1	...
Launceston .....	20,108	62	45	20	...	1	...	...	2	4	2	3	2	1
Country Districts .....	93,065	259	83	...	...	...	1	...	1	3	...	...	...	...
<b>VICTORIA.</b>														
Melbourne .....	69,774	136	139	} 627	1	1	14	4	31	140	92	46	21	6
Suburbs .....	275,606	1,129	973											

## METEOROLOGICAL OBSERVATIONS FOR DECEMBER, 1888.

STATIONS.	THERMOMETER.					Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.			Depth.	Days.		
Adelaide—Lat. 34° 55' 33" S. ; Long. 138° 36' E. ....	...	107.5	74.8	48.9	29.828	Inches	...	...	...	...
Auckland—Lat. 36° 50' 1" S. ; Long. 174° 49' 2" E. ....	139.8	75.5	59.5	43.5	...	1.260	9	67	...	...
Brisbane—Lat. 27° 28' 3" S. ; Long. 153° 16' 15" E. ....	154.8	94.5	75.3	59.4	30.001	6.008	13	69	...	...
Christchurch—Lat. 43° 32' 16" S. ; Long. 172° 38' 59" E. ....	157.8	88.2	56.5	34.4	...	.893	11	65	...	...
Dunedin—Lat. 45° 52' 11" S. ; Long. 170° 31' 11" E. ....	140.7	75.5	54.2	35.5	...	3.570	13	74	...	...
Hobart—Lat. 42° 53' 32" S. ; Long. 147° 22' 20" E. ....	...	91.3	61.7	39.9	29.047	1.45	6	69	...	...
Launceston—Lat. 41° 30' S. ; Long. 147° 14' E. ....	...	91.1	68.8	39.9	29.974	1.31	3	58	...	...
Melbourne—Lat. 37° 49' 54" S. ; Long. 144° 58' 42" E. ....	...	96.4	66.7	47.2	29.884	2.72	9	...	...	...
Sydney—Lat. 33° 51' 41" S. ; Long. 151° 11' 49" E. ....	...	85.8	70.5	57.8	29.969	4.34	17	77	N.E.	...
Wellington—Lat. 41° 16' 25" S. ; Long. 174° 47' 25" E. ....	140.7	71.5	57.2	44.8	...	2.425	14	78	...	...

# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### THE TREATMENT OF SOME FORMS OF UTERINE DISEASE BY ELECTROLYSIS.

READ BEFORE THE MEDICAL SOCIETY OF QUEENSLAND.

BY WILLIAM S. BYRNE, A.B., M.B., UNIV. OF DUBL., HON. PHYSICIAN BRISBANE HOSPITAL.

SOME ten months ago I read in *Braithwaite's Medical Retrospect* an article by Dr. Apostoli on the treatment of Fibroid tumours of the uterus by electrolysis, and as I was then engaged in treating a case, in which I was much interested, and not having much faith in the usual ergotin treatment, I determined to get an instrument from Gaiffe, in Paris, and give my patient, what appeared to be, the best chance of cure with a minimum risk. This patient—to whom I shall call your attention farther on—received a daily subcutaneous injection of ergotin—in doses of from three to four grains—for nearly five months, Huggett's solution being the preparation employed, and during the whole of that time there never was any abscess formed about the punctures, or any inflammation whatever, though on four or five occasions there were severe rigors and high temperature a few hours after the injection, for which I am at a loss to account.

Between the time of ordering the battery and its arrival I studied carefully the elements of electrolysis, and to-night I wish to give you my honest experience—a short one of a few months—of this form of treatment, and the results I have obtained from its use. Apostoli's apparatus consists of a case containing twenty-four Leclanché cells, a switching board—by means of which as many or as few can be used as required—a galvanometer, a platinum sound, with removable handle, three vulcanite insulating tubes of different lengths, three puncturing trocars of different sizes, made of steel, two zinc plates for using in the potter's clay, and a faradaic apparatus, which latter subject I shall not touch on to-night.

I may as well state shortly the method of using the instruments. The length of the uterus being measured by an ordinary sound, the platinum sound is insulated by the vulcanite tube about half an inch short of the full length of the uterus,

so that the lower portion of the cervix and upper part of vagina may not be subjected to the current, for, strange to say, the cervix, usually so tolerant of cutting operations, is very sensitive to galvanism. Then, having connected the sound to the positive or negative rheophore, as required, a *plac* of potter's clay, about eight by six inches, is laid on the abdomen, which is protected from the dirt by a piece of mosquito net, the zinc plate firmly embedded in it, and the cells switched on.

There have been many writers on this subject, some most adverse in their criticism, whilst others have praised it with extravagant eulogy.

Amongst others who have detailed their experiences are the two Keiths, of Edinburgh. Thomas Keith first abuses roundly the operation called hysterectomy, stating in plain terms, that it is one which has done more harm than good, and then calmly proceeds with the statement that he is about to perform it on several patients when he returns from his holiday. He also writes that his son, Dr. Skene Keith, and himself have applied electrolysis over twelve hundred times, in one hundred cases the majority being Fibroids; and, in the very next paper Dr. Skene Keith mentions and gives details of six cases of Fibroids, acknowledging first, that it is in only these that there has been a decrease in the size of the growth.

For my part I fail to see, that if we only get a decrease in six per cent. of Fibroids, after having had the labour of applying the current twelve hundred times, that there is much superiority over the old ergotin treatment. Dr. Steavenson has also written on the subject, and has given some useful hints on the method of applying it. At one part of his paper he says, that electrolysis is not so free from danger as Apostoli would have us believe: for should a break occur when passing a current of any strength, alarming collapse might be induced. It has happened with me on several occasions that a break has occurred when passing a current of about 150 to 200 milliamperes, with but little discomfort to the patients, but should a circuit be suddenly closed with that current strength, I can understand the danger. I am always careful, if a circuit suddenly opens to keep it so until the cells are switched off.

It has been suggested that some other conductor—cleaner than potter's clay—could be found. Spongiopilin, and wet cotton-wool attached to a piece of wire-gauze has been used, and I tried it, as the clay is filthy stuff, but when a fairly strong current was used, the tingling produced by the density of the current passing through the filaments of wool, by reason of the wool pressing unevenly on different parts of the

skin—I found unbearable to the patient, and I was forced back to the clay, which fits evenly and causes no pain, though, as a rule, the skin becomes red where it has been placed.

With regard to the sound, Apostoli says: "The positive checks hemorrhage and the negative rather induces it." Strange it is that the opposite is the immediate result in my experience. After using the negative intra uterine sound on withdrawing the vulcanit tube, it has always been found full of air bubbles; but when the positive has been applied the tube is filled with blood. Also, in one of my cases of Fibroid I have been using the negative intra-uterine sound for some months steadily twice a week, and although the tumour remains the same the hemorrhage is completely checked, whereas Apostoli states: "That the checking of hemorrhage in such cases is due to the diminution in size of the tumour." In measuring the strength of the current passed by milliamperes, misapprehension is likely to be caused, as the current strength depends altogether on the amount of sound within the uterus, or, in other words, upon the resistance. If, as in some cases of fibroid the sound penetrates into the uterus to the depth of say five or six inches, and that length left uninsulated and six cells be switched on, we shall get a current of about 70 milliamperes, which will cause the patient but little inconvenience, but if only two-and-a-half inches of sound be uninsulated and a current of 70 milliamperes passed, which will require about 12 or 14 cells, we shall find that it is about as much as the patient can bear as a rule. So you will understand that a woman will in the one case be able to bear with comfort a current of 250 milliamperes, but by shortening the sound, or in other words increasing the density of the intra uterine pole, a comparatively mild current of 50 milliamperes will cause pain.

As I am speaking of the sound I may as well mention that measurement of the uterine cavity by that instrument in cases of fibroid, is particularly misleading. In the same patient I have measured various lengths at different times without any apparent diminution or increase in the size of the tumour, and have no doubt that from the irregularity in shape of the organ from time to time, the sound will on one occasion pass a slight obstruction without difficulty, where on another it will be unable to enter more than half the distance. In one of my cases I measured the length of the uterus on commencing treatment and found it to be five inches. A week afterwards my feelings went up to summer heat when I found it to be four inches; but a week after freezing-point was reached when

it measured six inches. It is impossible to have these variations of measurement without a visible diminution in the size of the tumour, but none ever occurred, so I have given up the sound as an instrument capable of showing alterations in size, and wish for something else more capable of helping me in this difficulty.

I now come to the main object of my paper—the treatment of cases and their results, and shall first draw your attention to those cases of fibroid tumour which have been under my care.

Case I.—Mrs. S., aged 28, first noticed tumour three years ago, suffered from menorrhagia since that time, being as a rule from 14 or 21 days unwell, and free from the catamenia for about 14 days. The tumour, when she came under my care nine months ago, extended nearly to the umbilicus, and was still growing, she said. For four months I injected three grains of ergotin daily in the buttocks, in the form of Huggett's solution, kept her in bed for two months, and during the remaining two months whenever the catamenia appeared she retained the recumbent position. The result of this treatment at the end of five months (during the last month nothing was done), was that while she rested the menses were not so profuse, but latterly the discharge came on at 14 days' interval and lasted ten days, and was as profuse as ever. I do not think that the tumour had increased in size during the time, but that is the most I can say as the result of this treatment. Four months ago I commenced electrolysis, and from that time to the present she has had 28 negative intra-uterine applications, varying in strength from 50 to 220 milliamperes, and six galvano-punctures from 70 to 90 milliamperes, her present state being no decrease in the size of the tumour, but a wonderful check to the hæmorrhage. During the past three months she has menstruated three times, the flow on two occasions lasting six days, and on the last four days being moderate in quantity, and she has been going about all the time, except at the menstrual period, when she keeps fairly at rest. If she does too much walking or working she feels the tumour, but not otherwise. She is rather disappointed at not losing the tumour altogether as she had great hopes of electrolysis dissolving it.

Case II.—Mrs. A., aged 34, has suffered from menorrhagia for five years, at which time she was confined. Menstruates every month, the flow, however, lasting only three days, but is very profuse. There is a large tumour to be felt extending to the umbilicus, and at the sides nearly to the iliac crests, and she has all the concomitant symptoms of such a growth. There

have been in three months 13 negative intra-uterine applications, and three galvanic punctures, her present state being, I may say, bad. She is very thin and weak, the discharge is not improved, and although the growth has disappeared from the vagina to a certain extent it seems larger abdominally.

Case III.—Mrs. C. D., aged 45, has suffered from menorrhagia for the past six years, menstruating very profusely for seven days each month, but is now no worse in that respect than she had been previously. There is a tumour the size of a large orange to be felt over the symphysis pubis; a positive intra-uterine application of 50 milliamperes was used, and in a fortnight after a similar one of 80 milliamperes.

A month afterwards she called on me and I found on examination that the tumour had almost disappeared. In fact it was not to be felt over the abdominal wall. In case there might be some doubt as to the diagnosis in this case, I may say that she had been under the treatment of Dr. Taylor for Fibroid, who kindly sent her to me, and I fully concurred in his opinion.

The other cases in which I have used electrolysis comprise menorrhagia from various causes, flexions and versions, and in these I may mention that the results have been eminently favourable, particularly when I mention that most of the cases had been under treatment for a length of time without being benefitted in the slightest degree.

Case I.—Mrs. R. aged 29, 2 children, one miscarriage at five months, one and a half years ago, since which time has menstruated ten days and is fourteen days free, and has lost two stone in weight during past twelve months. Uterus normal in position, measures three inches. Has been under the care of two medical men for four months without any relief of symptoms. Treatment consisted in three applications of the positive electrode, lasting ten minutes each time, varying from eighty to sixty milliamperes at intervals of fourteen days. After the first sitting she menstruated four days, after the third one and a half days, and then went back to Rockhampton. Three months after I had a letter from her stating she has menstruated regularly every month since, the flow lasting on each occasion five days, that she is picking up lost weight and feeling better than she has done for the past twelve months.

Case II.—Mrs. L., aged 42, menorrhagia twelve months, and has been continuously "unwell" for past two months, passing much clotted blood; two children, sixteen years since birth of last; uterus  $2\frac{1}{2}$  inches in length, nothing abnormal found on examination. A fortnight's trial was given to Ergotin in pill three times daily, but

without any effect, and as she complained very much of debility and faintness a current of twenty-five milliamperes positive electrode in utero was passed. The next day but one I was hurriedly sent for, an alarming message being left at my house, and as this was one of my early cases I naturally felt anxious, but was relieved on my arrival at the house to find my patient was only suffering from an overdose of pea soup, as she said herself, "I felt so well since Wednesday that I could not help eating too much." A second application was made in ten days, and two months after she was perfectly well, menstruating but three days monthly.

Case III.—Mrs. T., aged 32, five children, last born eight months ago, never been well since. A month after parturition menses commenced, lasted a week, and ever since has been poorly for from twelve to fifteen days and well about ten days. Has been under treatment for seven months, including six weeks in hospital, during the whole of which time she was confined to bed. On examination, the uterus was found much retroverted and three inches in length. This was a tedious case, eleven positive intra-uterine applications being made at intervals of a week, with the result that the uterus has returned to its normal position, and the hæmorrhage completely checked. This is all the more interesting as Dr. Love, who sent the patient to me, and Dr. Hare of the hospital have informed me that they tried many pessaries, but without any avail. The patient has never been laid up in bed, is gaining flesh, and has done, in addition to her home work, a day's washing.

Case IV.—Mrs. C., aged 24, two children, last twelve months, ever since suffered from menorrhagia, menstruates every fortnight, and is twelve days unwell. The uterus is retroverted and measures three inches. Has been two months under the care of a medical gentleman, but without any good result. In two months six applications of the positive electrode were made, and now she is perfectly well, uterus returned to normal position, last two menstrual periods lasted four days each.

Now as regards the cases of Fibroids; as far as diminution in size is concerned I must confess I am disappointed. I commenced the treatment with great hopes of ultimate cure. Perhaps my experience is slight, perhaps a longer term of treatment may surprise me, but I simply lay the facts before you and await some expression of opinion which may possibly help in this question of dissolution of tumours. I have seen electrolysis used over and over again in the treatment of small nævi, and I must say that I consider the knife to be the most satisfactory treatment in many instances. Whether the electrolytic treatment in

Fibroids has been over-rated or no is not for me to say; time alone can prove it.

I can hardly believe that the disappearance of the tumour in case 3 was due to electrolysis, though it is strange so sudden an improvement should ensue after six years' suffering. That electrical treatment has a powerful influence in arresting hæmorrhage I am convinced, and if by this method we can prolong life in Fibroids to the menopause many hysterectomies which would otherwise be imperative can be tided over, and many lives not placed in jeopardy. On the other hand, should hæmorrhage be arrested and the tumour still increase in size in a young woman, I would ask you what course should be adopted? Again, how is it that electrolysis reduces versions? I am rather inclined to believe that the uterus keeps its normal position not by reason of the round or utero vesical ligaments, but that its position approaching anteflexion is secured by the contraction of the uterine muscular fibres themselves, and that their relaxation, as in enlargements of the organ, causes version or flexion as the case may be.

In concluding, I may add that, in my opinion, we have in electrolysis an agent worthy of extended trial, that by it we shall be able to cure quickly and without risk, many cases which would otherwise be a constant source of annoyance and worry, and attended with but little satisfaction to either patient or doctor, that by it flexions and versions, old and intractable cases, can be much improved; but with regard to the dissolution of Fibroids, my results have not been such as to enamour me of the treatment, though I think that in justice to our patients we should in every case give them the benefit of the doubt before proceeding to extremities in performing hysterectomy, an operation brilliant when successful, but alas! too often followed by the direst results even in the most experienced hands.

### TRACHEOTOMY IN DIPHTHERIA.

READ BEFORE THE SOUTH AUSTRALIAN BRANCH  
OF THE BRITISH MEDICAL ASSOCIATION,

BY H. SWIFT, B.A., M.D. CANTAB.

THE title of this paper should have been Tracheotomy in Diphtheria. In bringing this subject before your notice, I have been actuated not so much with the view of putting forward my own ideas and experiences, as the desire of promoting a discussion and eliciting from the Members present, their opinions on this interesting question,

and learning from them whether the experience gained during the three years, since this subject was discussed by this Association, has led them to alter the opinions they then expressed. In reading the report of this meeting in the proceedings of the S.A. Branch of the B.M.A., I find that the majority of speakers were adverse to the operation, as the mortality was so great, but I could not find that any reason was assigned for this high percentage of fatal cases.

Whilst I was resident at the Children's Hospital, Great Ormond-street, where a small ward is set apart for cases of Diphtheria, I went into this question rather fully. I looked up the books—operation and *post mortem*—for ten years previous to my term of office in 1883, and I found that the average during that period was one recovery to four deaths; that for the latter five years the average was one recovery to 3.3 deaths; and during my two years of office the average was 1.3. At the same time I visited several of the largest hospitals in London, and found that the average was 1.7. The results obtained at the Children's Hospital are most satisfactory, and compare very favourably with any I have ever seen published. I see that one member remarks at the former meeting, that he had seen more cases recover, that were legitimate ones for operation, under medical treatment alone, than he had known recover after tracheotomy. What are legitimate cases for operation? At the Children's Hospital no case was operated on, until most urgent symptoms of dyspnoea were present, with great recession at the epigastrium and failure of pulse. When these signs are present and when every other means have been tried for relieving the terrible sufferings of the patient, then I consider that the operation ought to be performed. I have seen many children die in frightful agony, when the parents have refused their consent to the operation, but I have never seen a child recover when the urgent symptoms enumerated above have been present. I believe that the good results obtained at the Children's Hospital, were due in a very great measure to the cases being looked after by experienced nurses and not by juniors or probationers. As to the time when the operation should be performed, I think that, as a rule, it is delayed too long. By this I do not wish it to be concluded that I advise that Tracheotomy should be done in all cases of Laryngeal Diphtheria indiscriminately, but if after waiting to give other means a trial, we find the patient is still losing ground, I fail to see the advisability of putting off the operation until he is almost suffocated or exhausted by his unavailing struggles for breath, for he would then be much less likely to contend against the shock

of the operation and its concurrent dangers. Why should Tracheotomy be looked upon as a dernier resort; why should it not be the recognized treatment of severe cases? For other serious diseases we have severe operations followed by benefit to the patient, and I am sure that were the operation resorted to in Laryngeal Diphtheria more frequently and before the patient were completely exhausted, that we should not hear of such a high percentage of fatal cases, and the operation itself would not be such a "dreadful remedy" to the parents.

Now as to the cause of death after tracheotomy has been performed. In the great majority of the cases mentioned above, death was due to pneumonia or asthma, several died of albuminuria, and two only died of extension of membrane into the smaller tubes. Since I have been in Adelaide, Dr. Todd and I have operated on three cases, and each one of these has died of suffocation from extension of membrane. Is this only bad luck, or is it the usual experience of members? I believe that fortune has dealt hardly with us, and am strengthened in that belief by the remarks of Dr. Corbin, "that tracheotomy makes death comparatively comfortable instead of most distressing, a result so well worth attaining that the performance of the operation should be encouraged."

There are a few details in the operation which, although small, still are of great importance in the result to be obtained. One of these is the position for the incision. Dr. Ranke (of Munich) in a paper read before the British Medical Association at Glasgow, last year, recommends the low operation. Mr. R. W. Parker at the same meeting says, "there is now no longer any difference of opinion among surgeons as to the superiority of the high operation over the low," and anyone who has had to operate on children, with their short, fat necks, will endorse this view. To prevent septic infection and emphysema, care should be taken to disturb the parts as little as possible either with the fingers or retractors. It is a good plan to pick up each layer of tissue with two pairs of forceps, and to divide between them. By so doing you can avoid vessels, so that when the trachea is opened, no blood finds its way in, and so one cause of pneumonia is removed.

I would like to hear the opinions of members on the following points, viz. :—

- (1.) Is tracheotomy in diphtheria advisable?
- (2.) When should the operation be performed?
- (3.) What is generally the cause of death after the operation?
- (4.) Is intubation of the larynx preferable to tracheotomy?

## NOTES OF SOME CASES TREATED BY APOSTOL'S METHOD.

READ BEFORE THE MEDICAL SOCIETY OF QUEENSLAND.

By F. E. HARE, M.B., BRISBANE HOSPITAL.

I AM afraid it is rather premature for me to make any remarks on this subject, as most of the cases upon which I have tried the method are still under treatment. In two cases, however, I have obtained results that are sufficiently striking.

The first was that of a girl aged 16, who contracted gonorrhœa in a very severe form. When the ordinary injections had cured the vaginitis it was found she had a profuse purulent endometritis. The cervix was accordingly dilated, the uterus washed out with an antiseptic solution, and the endometrium painted with iodine. Several repetitions of this procedure resulted in cessation of the purulent discharge, but in its place remained a most obstinate uterine catarrh. Four applications of the positive pole, each of a strength of about 100 m'pères, resulted in its complete cure, and she has had no return of the trouble since.

The second case was that of a woman aged 45, the mother of four children, the youngest aged 15. Up to September, 1886, she had enjoyed good health, and had been free from uterine symptoms. About this time a period came on, which lasted eight or nine months. After this she had amenorrhœa for four months, and then almost continuous metrorrhagia until she came to the hospital. She also suffered from constant pain over the sacrum, increased by constipation, locomotion, or household work of any kind. On examination, the uterus was enlarged, heavy, and retroflexed, and measured about 3 ins. by the sound. The posterior lip of the cervix was hypertrophied, and the os gaping and eroded. But the most noticeable feature of the case was that passing the sound or even digital examination caused profuse hæmorrhage. She remained in hospital five months, during most of which time she was confined to bed or the couch. Many and various kinds of local treatment were tried. The cervix was several times dilated, and the interior of the uterus curetted and swabbed with pure nitric acid. On each occasion the metrorrhagia was checked for about ten days, but it then returned, and showed no tendency to again remit until the process was repeated. Although she had during the five months she remained in hospital the benefit of absolute rest, good diet, and attention, her condition on leaving was little altered, beyond some improvement in general health.

Four months later I sent for her, and offered to try electricity. She consented readily, as she

had already lost what little benefit she had gained.

She began to attend as an out-patient on November 8th. Between then and the present time she has had ten applications of the positive pole, of strengths varying from 75 to 165 m'pères, and usually lasting ten minutes.

At first there was slight increase of hæmorrhage for about twenty-four hours after each application, and on its cessation a rather profuse watery discharge, this being quite a new symptom. This has nearly ceased now. After the fourth application the sacral pain was much relieved, and since the sixth has disappeared. After the seventh, it was noticed that the cervix was much firmer, that the passage of the sound caused no hæmorrhage, and even the punctures made by the vulsellum only a drop or two.

On January 4th, when I last saw her, she had just recovered from a period that had lasted ten days, but which was quite moderate in amount. Previous to this she had been absolutely free from bleeding for four weeks, a thing that had not happened to her for over two years. Although her flexion remains unreduced she suffers from no symptoms except slight leucorrhœa, and may be considered, for the present at any rate, as symptomatically cured;—whether permanently or not it is, of course, impossible to say. Her anæmia has quite disappeared, and she says she is in as good general health as before her illness.

I have at the present time several other cases, more or less similar, undergoing treatment. Undoubtedly those which derive most immediate benefit are cases suffering from menorrhagia, dependent on an enlarged, heavy, congested uterus, and whose symptoms date from a confinement or miscarriage. These are usually classified as sub-involution or chronic metritis, according to the duration of the affection, and their treatment by the usual means, such as rest, ergot, and powerful agents to the endometrium, has been in my hands tedious and unsatisfactory. So far, Apostoli's method has seemed to me to fill this particular gap in uterine therapeutics.

In one matter of detail I have made a slight modification, and that is in the position of the cutaneous pole. So long as the clay is applied to the abdomen only, the greatest current density must flow through the anterior and to a less extent the lateral walls of the uterus. Now, it seems irrational to exclude the posterior wall from its due share in the therapeutic action of the current. I have, accordingly, in some cases, placed the cutaneous pole, on alternate occasions, on the back, and this has seemed of advantage. It has certainly a more marked influence in relieving the sacral pain that is so common in uterine disease.

### THREE CASES OF DIPHTHERIA.

(READ BEFORE THE SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.)

By W. T. HAYWARD, M.R.C.S.E., Hon. Medical Officer, Adelaide Hospital.

THE locality in which the three following cases occurred is a newly laid out and sparsely populated suburb adjoining Norwood. The house is new, well built, detached, and surrounded by a close fence, the nearest house to it is about fifty yards distant. The yard and back premises are kept scrupulously clean, and every attention is apparently paid to sanitary arrangements. A few fowls are kept which are apparently quite healthy, though one sickened and died about the time of this outbreak. In the house in closest proximity, a case of diphtheria occurred early in December; this house and garden is, I am given to understand, not a pattern of cleanliness, owing to the limited quantity of ground with a large population of the feathered tribe. I cannot find any evidence of direct communication between the inhabitants of the two houses, though the children are known to have occasionally gone at times in search of strayed fowls to the said garden. No other cases of diphtheria are known to have existed in the neighbourhood.

Charlie B., aged 6, a strong healthy boy, was first taken ill on December 12th, with a cold and slight hoarseness. He was not confined to his bed till December 18th, when I first saw him. His breathing at this time was rather hurried and he had a decidedly croupy cough with loss of voice. There was no sore throat nor any history of one. No redness or patches were to be seen about the pharynx or on the tonsils, a few râles were to be heard over the lungs. Temperature 103. Ordered Sodæ Salicyl. 4 gr. every two hours. In the evening, temperature 101, general symptoms somewhat abated though there were signs of recession of lower part of chest walls during inspiration.

Dec. 19th.—Very restless night, temperature 102, breathing very hurried, cough very troublesome and paroxysmal, and pulse rapid. These symptoms rapidly increased in severity, and by the afternoon the child lay in a state of semi-stupor, the face gradually assuming a cyanotic tint, extreme recession of walls of chest during inspiration, and on auscultation very little air was found to be entering lungs. In consultation with Dr. Lendon, it was decided as a last chance, as it was evident the boy could not live many hours, to perform tracheotomy. Dr. Lendon having administered a few drops of chloroform, I opened the trachea just below the cricoid cartilage and inserted a tube; a good deal of mucus was ejected, but no mem-



brane, and the relief obtained was immediate. For two days subsequent to the operation the patient suffered greatly from the cough, and the tube was frequently blocked with mucus and required constant cleansing. There was evidence also of bronchitis. The Salicylate of Soda was continued for two days, when a cough mixture containing Vin. Ipec. and T. Camph. Co. was substituted. The symptoms quickly subsided. I was able to remove the tube on December 24, five days after the operation. The wound was completely healed on January 1, and the boy appeared quite well and picking up flesh, though his voice remained husky till January 7th. There was some difficulty in swallowing fluids, which were inclined to return by the nose for a couple of days after the removal of the tube.

For the notes of my second case I am indebted to Dr. Borthwick, who attended it during my visit to Melbourne.

M. B., aged 15 months, sister to above case. This child had remained at home during the boy's illness, but had been kept from the sick room till he had become convalescent. She had had a severe attack of gastro-intestinal catarrh on January 1st, which lasted two days, but speedily subsided under treatment by a mixture of Bismuth and Sodæ Salicyl.

Jan. 10th.—I was told that the child had been ailing on the previous day; there had been considerable dyspnoea. Found the breathing of a croupy character, Pharynx red and swollen. Temperature 100. Prescribed Vin. Ipecac. and T. Camph. Co.

Jan. 11th.—Breathing more difficult, a distinct white patch on each tonsil. Temperature 100. Discontinued Vin. Ipecac. and prescribed Liq. Hyd. Perchlor.  $\text{m}$  v every three hours. Evening.—Symptoms as before.

Jan. 12th.—Dyspnoea more urgent, but air entering lungs fairly freely. Temperature 103. In consultation with Dr. Lendon decided not to perform tracheotomy. Evening.—Symptoms as before.

Jan. 13th.—Dyspnoea slightly relieved; temperature 100. Evening.—Further improvement. Considerable prostration.

Jan. 14th.—Temperature 99.5. Breathing easy but still croupy cough. Reduced Liq. Hydrarg. perchlor. to  $\text{m}$  jii every four hours. On taking charge of case this day I found child very weak with croupy cough but no physical signs, the pharynx being free from exudation.

Jan. 15th.—Decided improvement, takes food better, and is evidently gaining strength, discontinued his Hyd. Perchl. and ordered Potass. Chlor. and T. Cinch. Co. Child made a rapid recovery from this time.

Ethel B., aged 8, sister to above cases, was sent away from home on December 18th, the date on which I first saw her brother; she visited the house on December 22nd, 24th, and on the first occasion was allowed to see her brother, she looking into his room. On December 24th she went to the Semaphore, returning home on January 5th, where she remained till the baby was pronounced to be suffering from diphtheria, January 11th, when she was again sent away. She states that on January 12th she felt poorly, and during the evening she complained of her throat being sore, and on examination it was found to be red.

On Jan. 13th she was seen by Dr Borthwick, who noted that the pharynx was congested, and small white spots were visible on both tonsils. Temperature 100. To take Liq. Hydrarg. perch.  $\text{m}$  xv. every three hours.

On Jan. 14th I saw the child for the first time; she was sitting up in bed, was bright and cheerful, the temperature was 99.5, tongue tolerably clear. Breathing easy, and no croupy symptoms; there were yellowish-white mucoid looking spots studded over both tonsils, one or two on the back of pharynx, one on tip of uvula. I brushed one or two of them off quite easily, without causing any bleeding from the parts to which they were attached.

Jan. 15th-16th.—Condition much the same. Liq. Hyd. Perchl.  $\text{m}$  7.

Jan. 17th.—Temperature normal. Tonsils still red, but spots almost disappeared. Seems to suffer little or no inconvenience. Stopped Liq. Hyd. perch. Ordered Potass. Chlorate, gr. v. every four hours.

Jan. 18th-21st.—During these three days the temperature gradually rose, reaching 103.5 on the 21st, the uvula and soft palate became, firstly, very congested, and afterwards apparently infiltrated with a white mucoid substance, the parts being greatly swollen. The appearance was not such as is usually presented in cases of diphtheria, lacking as it did that leathery exudation, it looked as if there was an infiltration instead of a deposition of diphtheritic exudation. When however, subsequently, this condition cleared up, a raw bleeding surface was left. Ordered Sodæ Salicyl. gr. jii. every two hours.

Jan. 22nd-25th.—Under the influence of Salicylate of Soda the temperature was reduced, and the throat symptoms were kept in check, but the mucous membrane of the nose became affected. Great prostration, however, supervened; head symptoms became rather alarming, the pulse was very rapid, and the asthenia was so great that I felt bound to substitute Spt. Ammon. Ar. and brandy for the Sodæ Salicyl., with the result, that,

though the asthenic condition improved, the local symptoms resumed their virulence; the temperature rose again; it was soon evident that the larynx had become implicated.

Jan. 26th—Passed a bad night. Has lost her voice, cough croupy, but not paroxysmal. Temperature 108.4. Pulse very rapid. Is very weak. Ordered Liq. Hyd. perch.  $\mathfrak{m}$  30 every three hours.

Jan. 27.—Symptoms much as yesterday, except that respiration is increased in frequency. Temperature 102. Pulse 110. 6 p.m.—Respiration has become more and more difficult, air enters the lungs very imperfectly, recession of chest-walls during inspiration. Child lies in a dull apathetic condition, except when roused by cough. Local condition: ulceration of, and bloody discharge from, both nostrils, soft palate one white mass, uvula much enlarged, back of pharynx and posterior fauces also white, tonsils clearing. In consultation with Dr. Lendon decided to perform tracheotomy, and with his assistance inserted a fair sized tube, without much trouble, into trachea just below cricoid cartilage; immediate relief was experienced. To continue the Liq. Hyd. perchlor.

Jan. 28.—Has passed a very good night; tube requiring to be cleansed much less frequently than in case of her brother. Temp., 99°. Pulse 104. Child seems quite bright.

The subsequent history is brief: Improvement was both rapid and continuous, the discharge from the nose soon ceased, the uvula became smaller, the lip seemingly sloughing, leaving a raw surface, the soft palate and pharynx rapidly resuming their normal appearance—the surface of the wound, however, became coated with membrane. On the sixth day after the operation I was surprised to find that the voice had returned. I removed the tube and by the end of a fortnight the wound was closed; the child has been up and about for some days—her voice still remained rather husky. From the day after the operation I reduced, gradually, the dose of the Hyd. perchl., and on Feb. 2 substituted a mixture containing Chlorate of Potash and Tinct. Cinchon. Co. Two days afterwards I noticed that the uvula, which was previously clear, had again become tipped with the mucoid substance, but as there were no constitutional symptoms I did not interfere. This continued present for five days, when it finally disappeared. The child in the meanwhile had developed an enormous appetite, and soon began to lose her emaciated appearance.

Remarks.—I venture to think that there are several points of interest in these cases that are worthy of consideration and afford food for discussion.

In the first place, as to the nature of the disease, were they cases of true Diphtheria? I confess I had my doubts on that point. In the first case I had seen no direct evidence in the shape of patches, and the fact that the child recovered after tracheotomy was so against my previous experience. I had never had, nor seen a successful case of tracheotomy when performed for diphtheria—that I was inclined to look upon it as probably one of laryngitis simplex.

In the second case, the evidence did not seem sufficiently definite to point conclusively to its having been Diphtheria; it might have been a case of Follicular Tonsillitis, with a catarrhal extension to the vocal cords. In the third case, too, the initial symptoms were more analogous to Follicular Tonsillitis than to Diphtheria, and when the disease had spread the appearance of the affected parts was, as I have stated, more like that of an infiltration than of an exudation, and at no time was there any of that "peeling off" that is oftentimes so noticeable in cases of Diphtheria; but judging from the subsequent course of the disease if it was not Diphtheria I do not know by what other it might be called, and, as evidence that it was so, I may mention, that Dr. Wigg, who attended the neighbouring case assures me that it was undoubtedly a true case, as it was followed by distinct paralysis succeeded by capillary bronchitis some weeks later, from which it died. At the recent Medical Congress Dr. Sprin thorpe contributed a paper in which he described a large number of cases that had been sent to the Melbourne Hospital as cases of Diphtheria, all of which, I think, recovered, and he argued that they were not diphtheria but a form of influenza with localized infiltration; but I cannot recognise my cases as coming under that category.

The mode of infection in these cases is another interesting point. Here we have a child evidently with the disease upon him from Dec. 12 to Dec. 18, during this time living in the closest contact with three other children. On Dec 18 he is isolated, two of the children sent away from home, the infant remaining in the house. On Jan. 1 he is pronounced convalescent, and is allowed to mix with his neighbouring companions, none of whom become infected. His brother and sister do not return home till Jan. 5, the house in the meantime having been disinfected with sulphurous acid. The infant is infected on Jan. 10, and the two other children are again sent to a relative's, where they sleep together, and there is another child living in the same house. On the next day the little girl shows signs of the disease, but nevertheless sleeps with her brother that night, but is removed home

the day after. Neither the brother nor the other child become affected. I should also mention that the father suffered from an ulcerated sore throat from January 10-15, but not sufficiently severe to keep him from attending to his business.

I shall content myself with recording the facts, and shall not attempt an explanation. The recital of these cases affords a peg to hang a few remarks on the treatment of diphtheria generally. I may say that for some years past I have discarded the use of topical applications in these cases, and also the routine administration of perchloride of iron and chlorate of potash in the early stages, and this practice, or rather omission of practice, has certainly been attended by less discomfort to the patients, and I feel equally confident that my results have been better than they used to be. Up to the present time I have almost invariably prescribed salicylate of soda, and if the case has been seen at a sufficiently early stage the result has almost always been successful. So much so has this been the case that I have ceased to have the dread I formerly had when called to a case of this disease. The only local application I use is a gargle of permanganate of potash in children who are old enough to know how to use it.

In the above cases the drug (salicylate of soda) never had a fair chance; in the first, mechanical causes in the shape of croup had already put it out of court, and in the third it was not exhibited till the child's strength had been reduced to too low a condition to enable her to withstand the lowering effect that it sometimes causes. It has, undoubtedly, one great disadvantage, that is the severe head symptoms it induces when pressed. I believe that its beneficial effects are due to its antiseptic qualities. If a drug could be exhibited that should possess equally these qualities, and be free from its disadvantages it would certainly supplant it in my estimation. Dr. Jacoby, of New York, has recently brought prominently before the profession the value of perchloride of mercury in diphtheria, and from the experience I have had of it in the cases I have brought before you, I am inclined to think that it is well worthy of an extended trial.

You will have noticed that in the second case that I narrated, which bid fair to be equally severe to the two others, Dr. Borthwick adopted this treatment as soon as there was evidence that it was a case of diphtheria. The result was that the child made a rapid recovery without recourse having been had to tracheotomy, which at one time seemed inevitable. In the third case Dr. Borthwick also put the child on the perchloride, and she was doing remarkably well, when, unfortunately I suspended the treatment, thinking

that it was only a case of tonsillitis, and the child seeming almost well, I thought some milder drug would be more beneficial in that stage. I regret that I did not go back to the treatment when the symptoms grew worse, but I am convinced that the constitution was decidedly improved when I had recourse to it at a later period, though it was too late to prevent the mechanical results of the extension of the disease to the larynx. Nevertheless I feel that the satisfactory termination of the case after tracheotomy was considerably aided by the continued administration of the drug. It would be absurd to dogmatise on this matter with so small an experience, but I feel justified in commending it to your consideration in similar cases.

Much can be said for and against tracheotomy in croupal diphtheria, but my paper is already too long; so I will content myself with the expression of my opinion that that operation should not be looked upon as a curative agent, but simply as a means by which time may be gained in which to combat the disease, and that it is useless in those cases where the disease is of so severe a type that the patient is dying from the blood poison, and not from the asphyxia.

#### CASE OF DIPHTHERIA ABORTING WITHIN TWELVE HOURS FROM COMMENCEMENT.

BY J. W. YEATMAN, M.R.C.S. ENG.,  
OF AUBURN, SOUTH AUSTRALIA.

GEO. H., a well-nourished lad, aged 10. Seen at 4 p.m. on Nov. 30, 1888. Had been to school in usual health the day before. Felt unwell and complained of sore throat for first time that morning. Glands in neck were slightly enlarged. There was very little pain or tenderness. Breathing was noisy, throat full of frothy mucous, white patch on right tonsil. A good view of the throat was difficult, owing to his being delirious and resisting examination. Temperature, 103°; pulse, 148°, small and compressible. Wet rags frequently changed were wrapped round limbs and body till temperature fell and delirium subsided, and the following treatment prescribed: R. Tr. ferri perchlor., 4½ drachms; glycerine, 2 ozs.; F. mixt.; S., one teaspoonful every three hours. The throat to be swabbed out frequently with a solution of carbolic acid and glycerine, one in sixty. This being the state of the case, you may imagine my pleasant surprise the next day, when I found his condition (as described at the time in my note book), to be as follows: Dec. 1., 11 a.m.—Says he feels all right. Temperature normal, pulse 90, of fair volume and regular.

Slept well; had asked for and eaten chicken, and had asked for egg. No glands to be felt, all tenderness under jaw gone, opens mouth freely. There is no redness or sign of disease about fauces, except a slight mother-of-pearl shading on right tonsil about the size of a three-penny piece. From this time he made an uninterrupted recovery, and is now in good health. No symptoms of paralysis have occurred, but the patella tendon reflex and ankle clonus are totally absent. The former has been tested for most carefully in the old manner and by Jendrassik's method, which has been described by Dr. Buzzard in the *Lancet*, Jan. 28, 1888, page 159, as well as in other places. This last fact seems to clinch the original diagnosis, but whether the result was due to the treatment or not, of course I cannot say. The friends' impression is that the improvement took place after the second dose of the mixture, but this treatment must have been adopted so many thousands of times before, that it will be interesting to learn if it is unique. We know that the exanthemata and enterica occasionally abort, but I never met with a case of diphtheria doing so, or of any fever in which the symptoms at the onset appeared so grave, and in which the diagnosis afterwards could be proved to be, in all probability correct.

#### A CASE OF IMPERFECT ANUS. OPERATION ON DAY AFTER BIRTH. COMPLETE RECOVERY.

By C. E. TODD, M.D., M.R.C.S., L.R.C.P.,  
ASSISTANT PHYSICIAN, ADELAIDE HOSPITAL.

IN February, 1888, I attended Mrs. F. N. in her second confinement. The labour was terminated by the forceps with difficulty. The child, a male, appeared quite healthy, and, as the mother was bleeding profusely. I did not examine him as usual. The next day the nurse told me that the infant had not passed anything by the bowel since his birth, and, as he seemed in great pain through the night, she had given him a large dose of castor oil. This, however had not produced the desired result, and the child cried and strained constantly. On having him undressed the cause of all his pain was at once evident. In the situation of the anus was a depression with a bridge of skin running across it—from before, backwards—but no aperture of any kind. There was no bulging when the child cried or strained, and nothing to show whether the end of the bowel was near the surface, or not. With the assistance of Dr. Swift I made an incision about three-

quarters of an inch long; cutting through the centre of the depression and along the bridge of skin. About half an inch from the surface I came upon the rectum, distended with meconium, and looking black. I passed two silk threads through it, and drew it down to the surface, and, having opened it, sewed the mucus membrane very accurately to the outside skin. Large quantities of meconium passed with great relief to the child. I powdered the parts with iodoform, and left them free from any kind of dressing. Dr. Swift and I visited the case on alternate days after the operation, and we kept the anus open by passing dressing forceps, and expanding them inside. The edges of the bowel united rapidly with the skin, and there was no redness or swelling. After a fortnight I passed a large gum elastic catheter every few days for a month, and, since then, have not found it necessary to dilate the orifice at all. The anus is somewhat puckered, but it shews no tendency to contract, and the child is well in every way.

Adelaide, 6th February, 1889.

### PROCEEDINGS OF SOCIETIES.

#### NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

SEVENTY-EIGHTH GENERAL MEETING, held in Sydney, on 1st February. Present: Drs. Chambers, Hankins, A. T. O'Reilly, Knaggs, Kyngdon, Newmarch, Crago, Worrall, Todd, Cohen, Scot-Skirving, and Hodgson.

The minutes of the previous meeting were read and confirmed.

The Chairman (DR. KNAGGS) announced that DR. WATT, of Cobarr, had been elected a member of the Branch.

The Hon. Secretary stated that the amount subscribed towards the Cumming relief Fund was £115 1s.

The Hon. Secretary read a letter from Dr. Kyngdon, stating that he would be glad to represent the Branch while in England, during the next 12 months.

Resolved—That DR. KYNGDON be empowered to act for the Branch while he is in England.

The Report of the sub-committee appointed to make suggestions as to the administration of Anæsthetics, as amended at the General Meeting, held on Friday, 7th December, was again discussed and further amended, and finally passed in the following form:

Resolutions with reference to the Administration of Anæsthetics, finally passed at a General Meeting of the New South Wales Branch of the British Medical Association, held 1st February, 1889:

1. That in the present state of medical knowledge no one anæsthetic is the best drug to use on all occasions. The choice in each case must be left to the discretion of those in charge.

2. With regard to the responsibility—this falls on both the operator and anæsthetist, but varies in time and in degree. Both are responsible for the admissibility of anæsthesia and for the selection of the anæsthetic, but as soon as the actual administration is begun

the anæsthetist is alone responsible until restoration of consciousness for misadventures occurring through the action of the anæsthetic; the operator for those due to surgical accidents.

3. With regard to heart diseases generally, it should be clearly understood that they are no bar to the administration of anæsthetics.

4. Our present knowledge does not allow us to diagnose with certainty the existence of a fatty heart; but its presence does not forbid the use of an anæsthetic.

5. It should be clearly understood that, in certain cases, shock from operation without an anæsthetic may be more dangerous than an operation with an anæsthetic.

6. We are of opinion that, in the event of a collapse being induced by an anæsthetic, artificial respiration is the most reliable measure to be adopted. We also believe that the action of electricity is uncertain, and do not consider it necessary that the anæsthetist should be provided with an electrical apparatus.

Resolved—That a sub-committee be appointed to draw up a circular to be forwarded with the Resolutions when distributed. The committee to consist of Drs. KNAGGS, SCOT-SKIRVING, and TODD.

MR. G. T. HANKINS proposed: That the resolutions, as passed, be printed and distributed among the medical profession, and the medical societies of the Colonies. Carried.

#### ANNUAL MEETING.

The annual meeting was held in the Royal Society's Rooms on Friday evening, 1st March. Present: Dr. Chambers, President, in the chair, Drs. Lloyd, Creed, Hodgson, West, Clubbe, Hankins, Worrall, Sydney Jones, Jenkins, Milford, Newmarch, Crago, Todd, Lyden, Scot Skirving, Power, Reading, Twynam, Reddall. Visitor—Dr. Kirtikar.

The minutes of the previous meeting were read and confirmed.

DR. T. CHAMBERS, the retiring President, read the following

#### PRESIDENTIAL ADDRESS.

GENTLEMEN—By your favour I have had the honour of occupying the presidential chair of this branch of the British Medical Association during the year which closes to-night, and I approach its closing hour with considerable misgivings. But when I remember your generous support in the past, my spirits revive, feeling sure I may count on your kindly forbearance in this the last hour of my official year.

I am glad to have this opportunity of congratulating you on the continued success and prosperity of this branch, characterized (1) by our increased numerical strength, (2) by the excellence of the work done during the year, (3) by the satisfactory state of our finances, and (4) by the increased average attendance at our general meetings.

But this prosperity has had its brightness dimmed by the sable shadow of death, and also by the omission of important work which ought to have been accomplished before the year closed.

I much regret to record the loss of four of our members by death, viz., Drs. George Marshall, J. F. Ewan, H. Harwood, and C. Bohrsman. The first-named gentleman was a senior and highly respected member of our profession, who, by his upright conduct and uniform courtesy, as well as by his professional attainments, had won for himself universal respect and esteem, while the three latter gentlemen have been cut off in the morning of their days, before the object of their lives could possibly be achieved.

"Yet we trust that something good  
Will be the final goal of ill."

While I have to record, with regret, the loss of six members by resignation, I have pleasure in informing you that (14) fourteen new members have been elected during my year of office.

Now, as the work of the year has been excellent, it would be invidious to make special reference to individual contributions. But while refraining from comment upon what has been done, and well done, I may, perhaps be permitted to comment, very briefly, upon what has been omitted.

(1.) It would have been a source of profound satisfaction to me if a Benevolent Fund could have been established during my year of office. We must ever remember that there will always be with us a certain residuum of impecunious members, suffering widows, and destitute orphans, which we cannot honestly ignore. It is our bounden duty, no less than our privilege, to make some kind of permanent provision, however small, for our less fortunate brethren, their widows and orphans. Under present circumstances we must altogether ignore them, or send round the hat.

"Between these two alternatives there is no middle ground."

During the past year we have had four urgent applications for help. The management of the Laycock Fund was undertaken by our excellent secretary, Dr. Scot Skirving, who collected £130. While the Jockel and Cummings Funds were taken in hand by that excellent and fascinating beggar, Dr. Garrett, who, with much labour, collected for the Jockel Fund £130, and for the Cummings Fund £113. Then came the Martin-Brown Fund, which was kindly undertaken by two benevolent and energetic ladies, Mrs. Knaggs and Mrs. Pickburn, who, by house to house visitations and other means, including a concert, secured the handsome sum of £470. These several and varied efforts realized, together, the munificent total of £843. The managers of these several funds are justly entitled to our sincere thanks.

Now, while such combined effort greatly redounds to the credit of our brethren in this colony, and speaks well for their unselfish benevolence, yet we cannot for one moment suppose that such munificence can be sustained from year to year without some well organized system. What we need, and what we must have, is a well organized Benevolent Fund. True manhood is only attained by him who has learnt to live in the lives of his fellow men, and he is less than a man who has not within himself that latent sympathy which identifies the lives of others with his own. Sympathy is the chief criterion of true manhood.

(2.) There is another matter which I brought before you when I first took possession of this chair as your President, viz., the non-payment of consulting fees at the time of consultation—a habit which almost universally obtains in this colony, and, as far as I know, nowhere else in English-speaking communities. Why this matter has remained in abeyance so long I am at a loss to understand. It appears to be the general impression that medical men can be called together, in consultation, at any time or place without the remotest notion of their being paid when the consultation is completed—and I very much fear that, in not a few cases, there is neither the desire nor intention to pay at all, if such a contingency can possibly be evaded, and this peculiarity is not confined to the lower strata of society.

Now, who is responsible for this state of things, at once discreditable and humiliating? Ourselves, most certainly; let us, like men, take our stand, and let it be generally known, that while we are at the service of the public at all times and under all circumstances we require that the established consultation fees shall

be paid when the consultation is completed. If these facts were once widely known, I am sure the rule would be uniformly observed.

If we fail to take action in this matter now, then we must for ever cease to complain, and be content to be victimized; and, if we are, we well deserve to be. Whatever may be the shortcomings of Quacks, they certainly do not err in this direction, at least.

You are aware that during the present year a Committee was appointed by this Branch to offer suggestions with reference to the administration of anæsthetics. After several meetings and much discussion, the results of their deliberations were presented to, and adopted by, a general meeting of the Branch, held on February 1st. Whilst it is more than could reasonably be expected that the labours of the Committee should meet with universal approval, nevertheless, the majority of the members present at the general meeting were of opinion that they supplied an urgent need, and that they would be useful both to the profession and to the public.

With respect to the practice of the unqualified and unscrupulous pretender, nothing has been done by our "Noble Army" of Legislators by way of drawing a line of demarcation between the legally qualified practitioner and the unprincipled and designing pretender—

"The soul unprincipled in virtue."

The number of lives this smooth-tongued, self-asserting individual ruins or destroys, especially among women, is simply appalling; yet, nothing is done to mitigate the evil. The dead cannot speak, and the living are too much ashamed to do so, hence this monster, in human form, goes on his way, rejoicing in his strength to victimize, maim, or murder the innocents, whenever and wherever opportunity offers, without the slightest fear of evil consequences to himself. No one who knows anything of this unsavory subject, can, for one moment, doubt but that the continued presence among us of small-pox in its worst aspects, would be but a light evil in comparison. Our Governments are made and paid to guard the public health and morals as well as the public purse and property, and yet, upon this social scandal they appear complacently to smile.

In November last I saw a simple-minded country woman, who had come to town to "consult a doctor," and she—unfortunately for her—became the victim of one of these professional sharks, who informed her that she was suffering from syphilis in its worst form, and for this infamous lie he charged her the modest sum of £15—money down, of course. I saw her two days after this interview and can positively assert that she was as free from all indications of so loathsome a disease as the purest woman in the community. What have the fathers, husbands, and brothers among us to say on this subject?

You are aware that the Australasian Intercolonial Medical Congress held its second meeting in Melbourne during the early days of this year. Our Victorian *confrères* were unwearied in their efforts to provide for their visitors' mental and social pleasures of the highest order, and their labours were crowned with complete success. Their hospitality was not only profuse but extremely fascinating.

The third meeting of the Congress is to be held in Sydney under the Presidency of our much-esteemed *confrère*, the Hon. Dr. MacLaurin, and in order that it may be a complete success, we must be united as one man, and loyal to our excellent President; indeed this is an imperative duty if we are to receive our visitors with becoming hospitality. It is not enough that we

should wish success to the undertaking, but in order that it may be a success, we must each make a personal effort, and do our utmost to achieve it. I hope that every member of this Branch will willingly and liberally contribute of his mental and material wealth, according to the measure of his ability.

With these brief introductory remarks I will pass on to the subject matter of the address.

When first thinking over this address I was somewhat at a loss what course to adopt—whether I should follow in the well-beaten track of my excellent predecessors and again direct your attention to the important subjects of public health and sanitary medicine, or whether I should turn aside into some by-way less familiar perhaps to some, though equally instructive and important. Finally I elected the latter course.

Having in hand brief notes of 50 cases of Oöphorectomy, I propose, with your permission, to take a brief retrospective view of my personal experience of this operation—the ablation of the ovaries and Fallopian tubes, or, to use a more familiar term, the removal of the uterine appendages.

This operation was "foreshadowed in the tract of time" by Blundell in the first quarter of this century, who, in his "speculative moments," contemplated its feasibility as a curative agent in certain forms of disease peculiar to menstrual life, which are, not unfrequently, wholly unmanageable until the climacteric becomes established. But Blundell's inception was far in "advance of the times," and was doomed to oblivion for half a century.

"Among our crimes oblivion may be set."

The history of this operation is comparatively brief. On July 27, 1872, Hegar first removed the ovaries for the relief of certain constitutional disturbances, with a fatal result. Five days later (August 1) Tait performed a similar operation with a like result. Neither of these cases were (at the time) published. Sixteen days after Tait's operation Battey operated successfully, and published his case, which attracted a good deal of professional attention. Thus it happens that the credit of the operation has been accorded to Battey, notwithstanding that he was preceded in point of time by the two first-named operators. It is but just to Battey to say that the idea first occurred to him in 1865, but he did not meet with a suitable case until 1872.

Battey's main object, in adopting this operation, appears to have been, originally, the removal of the normal ovaries under the impression that they were the exciting cause of ovulation, and as a sequence, of menstruation, with their attendant pelvic hyperæmia and nervous exaltation, inducing certain reflex symptoms capable of successfully resisting all forms of treatment so long as they (the ovaries) were permitted to exercise their pernicious influence—his idea was to abrogate an important physiological function by the induction of an artificial menopause.

In 1882 Tait enunciated his views on certain forms of pelvic disease, which were not quite in accord with the views which had hitherto obtained. For example, he contended that the menstrual function comes within the jurisdiction of the Fallopian tubes, and in no way depends on ovarian influence; hence he pointed out that the main object of Battey's operation—"the premature cessation of the menstrual molimen"—could not be secured unless the tubes were removed as well as the ovaries, whether they were diseased or not. He contended that the persistence of the menstrual flow, or periodical sanguineous discharge, after ablation of the ovaries depended on the non-ablation of the tubes. This theory he put into practice, hence "Tait's operation"—the removal of the uterine appendages.

If Tait's theory is correct, it might fairly be asked upon what does the "periodical sanguineous discharge" depend when both ovaries and tubes have been carefully and completely removed? That such periodical discharges are frequently observed after such operations is not a matter of theory, but one of certainty. That such a discharge has occurred on the third day after the operation, and continued more or less freely for several days in 97 per cent. of my cases, is beyond question. In 47 per cent. the discharge has not recurred, while in 49 per cent. it recurred with more or less regularity for varying periods of time, and finally disappeared. In 2 per cent. the discharge was in no way interfered with by operative interference; and in 2 per cent. death occurred prematurely.

From this brief reference to Tait's views, it is manifest that he regards the Fallopian tubes as the main factors in the production of pelvic mischief, and the main object of his operation is to remove them.

I believe he has in some cases removed the tubes and left the ovaries intact, but what can be gained by such a proceeding I cannot pretend to say.

I may, however, in passing remark that, as far as I have had an opportunity of observing, the ovaries are much more frequently found to be in a condition of structural degeneration than the tubes, but whether this may, in any way, be due to the climate in which we live I cannot say.

In considering the merits of this operation as far as I have had opportunity of observing, it will be necessary to note that diseases for the relief of which I have adopted this operation are, ovarian prolapse, menstrual epilepsy, uterine fibroids, chronic ovariitis, congenital absence of the uterus and vagina, and inflammatory affections of the tubes.

I propose, as far as time will permit, to give a brief résumé of the several diseases for the relief of which I have adopted this operation, as well as one illustrative case in each class.

#### OVARIAN PROLAPSE.

(1) At each menstrual epoch the ovaries become hyperæmic, and increased in size as well as in weight, imparting to them a tendency to sink down to a lower level in the pelvis. Under ordinary circumstances this hyperæmia gradually subsides as the menstrual flow diminishes, and the overweight being relieved, the ovaries again assume their normal position. But, from some unfortunate circumstance, such for example as cold, those natural changes may be deferred or altogether omitted, and the organ, one or both, may remain surcharged with blood, and instead of rising to its normal position, as under ordinary conditions, it may sink still lower into the pelvis. This would appear to be the first step towards permanent displacement, or prolapse.

"Drooping like a rose-surcharged with morning dew."

The ovary being now located between the uterus and the sacrum, and subject to continuous mechanical pressure and irritation, locomotion becomes more or less impeded and attended with irritating and unnerving pains in the inguinal and sacral regions, and acute suffering during defecation, while sexual congress is simply intolerable, and general prostration both of body and mind becomes well marked.

A vaginal examination will now reveal an almond-shaped body of exquisite sensibility in the recto-vaginal space, more or less movable. If this body is pressed between the examining finger and the sacrum, the pain is intensified into agony, accompanied not unfrequently with nausea, and in old standing cases with severe vomiting. A dislocated ovary cannot under ordinary circumstances, be mistaken for anything else by a careful observer.

The dislocated ovary having now assumed an inverted position, it must of necessity exercise a pernicious influence over the broad ligament and Fallopian tube, especially the fimbriated extremity to which it is attached, by dragging them downwards and backwards into Douglas pouch. If this is so, it is not necessary that one should possess the "faculty of a nice discrimination," in order to understand the mischievous influence, such changes of position must necessarily exercise over the vascular and nervous supply of the structures involved viz., the ovary, Fallopian tube and broad ligament.

If this is admitted, then, as a matter of course, we should naturally expect the inevitable sequelæ viz., hyperæmia, oedema, tubal-ovarian varicocele (of which I have met with one well-marked example) effusion into the tube, infiltration into the broad-ligament, and interstitial hyperplasia of the ovary.

Now, if this be true then, the character of the fluid found in the Fallopian tube, whether it is serum, blood or pus, can only imply different degrees or stages of the same disease, having its origin in the changes of the circulation and nerve supply of the several important organs involved. Thus it appears to me that dislocation of the ovary, however induced, is not unfrequently an important factor in the causation of tubal disease. At any rate, this is the inference I have drawn from clinical observation, notwithstanding the high authorities who think otherwise.

I need scarcely remind you that the general symptoms attending ovarian prolapse will necessarily vary with the cause, and the stage at which the case comes under observation. If the dislocation is the result of a sudden accident, the symptoms will, in all probability, be severe and well marked, but if it is the result of progressive disease, the descent will be gradual and the symptoms will be less characteristic, but sufficiently well-marked to challenge the attention even of an ordinary observer.

Then the constitutional symptoms are very characteristic. The patient becomes restless, irritable, and emaciated, unfitted for the ordinary duties of domestic or social life. The bowels are torpid, the urine scanty, the tongue large, flabby and coated, the lips red and cracked, the appetite indifferent, and sleep is either altogether absent or disturbed and unrefreshing, which is usually referred to pains about the groin, hip, and loins; to the nape of the neck and occiput, or to intercostal neuralgia and palpitation. These symptoms appear to depend mainly upon defective digestion and nutrition, mal-assimilation, tissue starvation, and waste, with a thousand and one nondescript symptoms following in the wake.

As far as I can understand these cases, from clinical observation, I am inclined to refer the constitutional symptoms to reflex irritation, arising from disease in the pelvis, which, through the sympathetic system, exercises its evil influence over the important functions of digestion and nutrition. It has been well observed that "displacements of the ovary, apparently of so little import, is appalling in its consequences, and ruinous to the mental and physical organization of the unfortunate sufferer."

By way of treatment, all kinds of mechanical supports, aided by position, rest, and medication, have utterly failed when the organ has been long retained in its abnormal position. And why? Because degenerative changes of structure have been developed, rendering the diseased organ so hyper-sensitive that mechanical supports (however well constructed or carefully applied), cannot be tolerated. The only means of relief from suffering and wretchedness (both



mental and physical), of the most appalling kind (to say nothing of chronic invalidism and a wasted life), appears to be complete extirpation of the useless and hopelessly degenerated organ: indeed, "to apply the general principles of surgery and remove, that which is not only useless, but a curse to the whole economy."

Case I.—Mrs. M., *æt.* 25, married two years. When five months married, being then four months pregnant, she was thrown from a carriage and fell upon the lower part of her back with great violence, which was immediately followed by severe nervous shock and a violent attack of hystero-epilepsy. The fits were repeated at frequent intervals during the following week, during which period abortion occurred. These severe manifestations of nervous disturbance recurred with each returning menstrual period, which usually lasted a week. The attacks were repeated at frequent intervals during the menstrual flow, and were of so violent a character that the patient could not be left alone day or night. Similar attacks occurred when any attempt was made at sexual congress, and attended with such acute suffering that the attempt had to be altogether abandoned.

During the first nine months the attacks recurred only during the menstrual flow, then, without any obvious reason, they recurred every second week, and finally every week, so that the patient became incapacitated for any kind of domestic or social life.

From the date of the accident the patient was under the watchful care of my friend Dr. John Harris, of Newcastle. Medical treatment could modify the severity of the attacks, but could not, apparently, interfere with their return, and as the attacks became so frequent Dr. Harris sent her to me to know if anything could be done surgically for her relief.

On examination—a very painful process to the patient—both ovaries were found prolapsed and fixed by adhesions in Douglas's cul-de-sac. During the examination the patient became so much excited that her husband was afraid she would have one of her old attacks, and then there would be some difficulty in getting her out of the house.

The history of the case and the physical signs revealed by a digital examination, left no doubt on my mind as to the real cause of the oft-repeated and long-continued nervous manifestations. I fully explained to them what I believed to be the cause, and what I thought would be the best and, perhaps, the only course likely to mitigate or remove those fearful attacks of nervous irritation which had so thoroughly prostrated the unhappy patient, rendering her unfit for the duties of a wife in every sense of the word. As they were both anxious that something should be done as soon as possible I sent her to my private hospital and made arrangements for an early operation.

On September 23rd, 1886, I removed both ovaries and tubes, which were bound down by old adhesions in the recto-vaginal cul-de-sac. The ovaries were studded with cysts of various sizes, and the tubes were enlarged and filled with a sanguineous fluid. From this time the attacks ceased, the patient made an excellent recovery, and is now in good health.

#### MENSTRUAL OR OVARIAN EPILEPSY.

(2.) That epilepsy is, every now and again, intimately associated with ovulation and menstruation, and appears to descend wholly, or in the main, on deranged function of the sexual organs, cannot, I think, be questioned. The fits usually appear for the first time at puberty, coincidental with the first appearance of menstruation (or subsequent to injury, accidental,

or otherwise), they (the fits) not unfrequently continue through menstrual life, and generally terminate in mental impairment, if not in actual insanity. When the first convulsion accompanies the first menstrual epoch, the eclamptic attacks appear "ever after to revolve around ovulation as a kind of storm-centre." Such a life becomes valueless to society at large, and an ever increasing source of sorrow and anxiety to the patient and her friends.

Perhaps there may be in such cases a latent or hereditary predisposition to epilepsy of a direct or indirect nature, ready to be fanned into a flame of excitement by the approach of puberty with its thousand and one disturbing influences.

"Smit with the love of kindred, mingling flame with flame."

One can readily understand how a highly neurotic patient may, under such circumstances, become the victim of menstrual epilepsy.

But, without troubling you further with unprofitable speculations, I will briefly relate the particulars of a case in point.

M. F., *æt.* 19. Father healthy, mother suffered from ovarian disease and died after an operation, when M. F. was five years of age. She was a healthy intelligent girl up to the age of 14, when menstruation came on with much pain and constitutional disturbance, attended with rigors, faintness, vomiting, and convulsions of moderate severity. The discharge lasted four days, moderate in quantity and of a bright colour. After the discharge ceased she remained weak and languid for a few days, but soon recovered her usual health and spirits.

The next menstrual epoch was ushered in by a sudden and well-marked epileptic seizure, without any premonitory symptoms, and accompanied by the ordinary phenomena of true epilepsy, viz., great pallor and coldness of the surface, sudden falling to the ground with a piercing cry, and complete loss of consciousness. From this time every subsequent menstrual period was attended with one or more attacks. For the first few months the fits were limited to two or at most three, which either immediately preceded the menstrual flow (a few hours), or occurred simultaneously with it. During the menstrual intervals the girl appeared as well as usual, but was always dazed for a time immediately after the fits.

During the first year the fits increased both in frequency and severity, but were always confined to the menstrual period, and it was noticed that the girl gradually became less cheerful, and more careless about her personal appearance. In the early part of the second year the fits recurred every second week, and, finally, at much more frequent intervals, regardless of cyclical order which they had formerly observed.

As time went on, the attacks increased both in frequency and severity, so that it became unsafe to leave her without a constant attendant. Concurrently with the frequent recurrence of the attacks, the girl lost her former intelligence and activity; her mental and physical development not only ceased, but retrogression assumed pre-eminence.

"Painful pre-eminence, yourself in view."

From being a well-developed girl both mentally and physically, cleanly in her person active and intelligent, she became morose, sullen, and idiotic, careless about her personal appearance, unclean in her habits and conversation, and stunted in her growth.

For several years she passed from one specialist to another until she had exhausted most of the celebrities of the day, and had been subjected to much and varied treatment with but negative results.



After five years thus spent, the question of surgical interference came to the front, and after much deliberation it was deemed to be the only course offering any prospect of relief. But the patient's friends could not overcome their prejudices to such a course, until they were fairly convinced that medications of every type were utterly useless.

On May 10th, 1876, I removed both ovaries by abdominal section. The patient had a severe epileptic seizure three hours previous to the operation, but there was no menstrual discharge, although the period was close at hand. The right ovary was much smaller than normal, atrophied, and exhibited no signs of recent ovulation. The left was more than twice the normal size, very hyperæmic and exhibited the clearest possible proof that a Graafian follicle had but recently ruptured. It is more than probable that the recent fit and the follicular rupture were simultaneous events. Both tubes appeared to be healthy, and they were left undisturbed.

Recovery was not rapid, but it was complete, and in all respects most satisfactory. On the third day after the operation there was a pretty free sanguineous discharge from the vagina, which continued four days, but there were no indications of any nervous disturbance by way of fits. Menstruation never returned, neither was there any recurrence of the epileptic seizures, although there were occasional attacks of faintness during the first year after the operation.

Two years after the operation the patient appeared in perfect health, all that idiotic obtuseness and personal carelessness—so well marked before—had given way to an intelligent care over her habits, conversation, and personal appearance; indeed she appeared in all respects most unlike her former self. I hear of her occasionally, and, as far as I know, there has been no return either of menstruation or of the epileptic attacks.

Here, gentlemen, you have a very brief and imperfect history of a most interesting and instructive case. Can there be any doubt in the mind of any man, who is not blighted by prejudice, that Oophorectomy was the only remedy in this case? I have noticed that in all my cases of this class that repair of the surgical injury is slow. This is the only operation of the series done outside the Colony.

### (3) UTERINE FIBROIDS.

UTERINE FIBROIDS are, as a rule, fairly manageable; they give but little trouble or annoyance in the majority of cases; but, now and again, such a visitor—from some imperfectly understood cause—becomes a source of continuous irritation, and the uterine resentment becomes fully aroused, with a view to its expulsion; but the growth remains refractory, and obstinately resists all forms of treatment. Under such circumstances the patient's vital powers are gradually, perhaps, but surely diminished by continuous suffering, frequently repeated floodings, and depraved nutrition, so that she finds herself a helpless invalid before she has time to realize her hopeless position—her only hope being in the climacteric, which, in such cases, is frequently deferred for several years beyond the usual time. In the mean time death may overtake her perhaps from some other ostensible quarter, and thus it happens that the death is not attributed to its real cause, but to some other condition, of which it (the fibroid) was the primary predisposing factor; hence we are told that fibroids never destroy their victims.

Uterine fibroids assail the vital centres of life in two important ways. (1) by hæmorrhage, and (2) by mechanical pressure. Thus it sometimes happens that

while the growth may be comparatively small, especially in women between 30 and 40, the hæmorrhage may be very excessive, defying all forms of treatment; while, on the other hand, the growth may have assumed immense proportions, and yet the hæmorrhage may be of no great importance. In the one case life and comfort may be as much imperilled by blood loss, and its devitalizing consequences, as in the other by mechanical pressure—which destroys life, or the comforts of life—by the injurious influences which it exercises over the important functions of nutrition, secretion, respiration, and rest.

Now, it is well known that in a certain proportion of cases uterine fibroids give rise to few, if any, symptoms of importance, hence it naturally happens that such cases call for little, if any, treatment.

In another proportion, where the patient has come within "a measurable distance" of the menopause, by a judicious combination of recumbancy, diet, and medication, the patient may be safely conducted through her many difficulties into the peaceful haven of climacteric rest.

But there will always be a certain residuum of cases which, from various causes, cannot safely wait until this, much to be desired, period has arrived. Where life is menaced by the devitalizing effects of long continued and exhausting disease, and where all medical efforts have proved abortive. Where hæmorrhage is severe and accompanied by urgent visceral disturbance due to compression, irritation and general exhaustion. What can be gained in such cases by waiting until the growth has attained a huge size and the patient has become exhausted beyond all hope of restoration?

It is to this latter class, where medicines, rest, and diet have utterly failed to relieve the patient from wretchedness, suffering, and impending death, that surgery volunteers a helping hand by one or other of the several methods at her command, viz., by curetting, enucleation, electrolysis, or removal of the uterine appendages.

(1.) Curetting is certainly a useful and, in some cases, a very valuable procedure. Wylie speaks enthusiastically of this method. He says, "For some years past, instead of removing the ovaries or performing hysterectomy for uterine hæmorrhage, I have first curetted the cavity of the uterus. The results have been so satisfactory, and lasting that I have lost the chance of performing laparotomy in a large number of cases. And I can say the same in regard to those cases where the hæmorrhage appears to be due to ovaritis." I regret to say that, in my hands, curetting has not been attended with such complete success, although it has certainly been useful and should, in all cases be tried before proceeding to more heroic measures.

(2.) Enucleation is usually a formidable and dangerous operation, even in the hands of skilled experts. What it must be in the hand of the reckless and inexperienced you may easily imagine. The chief sources of danger in my experience are hæmorrhage and subsequent septicæmia, hence the after treatment of such cases demands the utmost vigilance, absolute cleanliness, and indefatigable attention; but enucleation is limited in its application to submucous fibroids.

(3.) Electrolysis has of late been highly lauded as a sure and harmless remedy in all cases of uterine fibroid growths. It ought to be carefully considered and honestly tried, notwithstanding the fact that the results hitherto obtained by the majority of experimentors are not quite satisfactory. The most that can be said in its favour at present is that, in skilful hands, it will, after a considerable time, mitigate urgent symptoms, such as hæmorrhage and severe pains, but this much can be

said in support of any well organized and judiciously directed plan of treatment. Indeed, it is well known that fibroids, even of considerable dimensions, will sometimes disappear without any kind of treatment whatever. I have seen several cases of this kind. That electrolysis may, "in the fulness of time," play an important part in the treatment of uterine fibroids may be reasonably admitted, but while this method of treatment is being matured, we must be content with the methods at our command, which practical experience has taught us to regard with confidence and satisfaction. From what I know from experience and reading, I cannot but think that electrolysis is a more fatal procedure than oöphorectomy.

(4) Oöphorectomy is a surgical resource of which we may take advantage where less heroic measures have been fairly tried and have proved abortive. Its object is the premature induction of the menopause, which, in my limited experience, has been attended with the best results both in ameliorating urgent symptoms, and in reducing the size of the tumour.

Observation would incline me to the belief that there is a distinct class of uterine fibroid growths well suited for this method of treatment. The subjects of such growths are usually unmarried women between 30 and 40, the tumour is of moderate size, involving the whole uterine body, and of moderately rapid growth; the leading symptom is exhausting and progressive hæmorrhage which defies all medication, however carefully prescribed or perseveringly directed. I shall better illustrate my meaning by giving a case.

#### CASE III.

Miss L., æt. 35. Came under my care in June, 1886, suffering from hæmorrhage, which had continued about two years, the menstrual intervals having gradually diminished so that the discharge was almost continuous. Six months after the menstrual flow showed signs of increase, the uterine fundus appeared above the pelvic brim, and gradually continued its advance upwards, the menstrual flow increasing in quantity and duration as the tumour increased in size, notwithstanding the medical care which had been given to the case.

The patient was very anæmic and so much reduced as to be unable to leave her bed for any length of time, as such efforts were attended with sharp attacks of palpitation and dyspnoea, with marked dilation of the nares during inspiration.

Hyperæsthesia was so marked that manipulation was not possible without an anæsthetic. The lower zone of the abdomen was occupied by a globular tumour of uniform density and resistance, having a central position but not very movable, its vertical diameter was  $5\frac{1}{2}$ , and its transverse diameter  $7\frac{1}{2}$  inches. Its surface was smooth and free from projections. Per vaginam, the uterine cervix felt shortened, had a central position, but was much higher up than normal, the pelvic brim was occupied by the tumour which appeared to fit closely into it. The normal functions of the bladder and rectum were a good deal encroached upon by the advancing growth. The physical characteristics of the tumour were identical with those observed through the abdominal wall. The sound passed upwards in the median line, and while in this position the growth was carefully manipulated through the rectum as well as through the abdominal wall, and appeared to be of uniform outline and density without irregularities and projections, it appeared to be one uniform mass forming what I may, perhaps, call a cylindrical fibroid.

The treatment embraced complete rest, careful dieting, ergotine, atypic injections, the ice-bag, and

electricity. In October she became depressed, dispirited, and impatient; her general health was rapidly failing, and as medicines and their adjuncts appeared to be doing nothing towards a cure, she was anxious to try the resources of surgery, which she had hitherto regarded with fear and distrust.

At her urgent request I removed the uterine appendages on October 29th, 1886. The uterus had rotated from left to right, so that the appendages on the right side were turned into the sacral hollow, importing an element of difficulty into the operation. Both ovaries were undergoing cystic degeneration and had formed local adhesions; the tubes appeared normal.

When placed on the table for operation the temperature was 100, pulse 120, and the respirations 30. On the following morning the temperature had fallen to 99.5, the pulse to 96, and the respirations to 24. On the third day, when the uterine epistaxis appeared, the temperature again went up to 101, and continued to range between 100 and 102 until the tenth day, when it began gradually to descend until the twenty-fifth day, when it had, by slow gradations, reached the normal line. From this time the tumour, which had from the third day been more or less elastic, sensitive, and increased in size, gradually diminished in size and increased in density. The increase in the size, elasticity, and sensibility of the tumour with the high temperature, which prevailed from the third to the tenth day, would imply subperitoneal effusion. This, I believe, always takes place, in such cases, to a greater or less extent.

This patient made a very satisfactory recovery, and left for the country early in January, 1887. I did not see her again until June, 1888, twenty months after the operation. There had been no sanguineous discharge or leucorrhœa since the operation, excepting the uterine epistaxis on the third day, an event which almost invariably follows oöphorectomy. The uterine tumour with its numerous retinæ of human ills, had entirely disappeared; her old and faded facial aspect had become lost in the fulness of health and renewed vigour; she was indeed, in the fullest sense, a cure, alike satisfactory to herself and creditable to the science of surgery. This is a fair type of this class of cases.

#### (4) CHRONIC OVARITIS.

Chronic ovaritis is the reputed parent of much mental wretchedness and physical suffering. It is the result of persistent hyperæmia, or such tissue changes as result from previous attacks of acute inflammation, or continued passive congestion, with infiltration, increased size, and general hypertrophy, inducing interstitial or follicular degeneration. Follicular degeneration is called in question by a recent observer.

If the stroma is chiefly effected the organ becomes hardened and contracted, and as far as I can judge this is the most painful and irritating phase of chronic ovaritis; but if the disease attacks the follicles chiefly, it forms the groundwork for the ultimate cystic degeneration of the organ.

Whether ovaritis, either in its acute or chronic form is ever idiopathically developed, is more than doubtful. Observation would incline me to the belief that it is—in the great majority of cases at least—secondary to dysmenorrhœa, abortion, parturition, or gonorrhœa (in such cases the tubes are usually involved), at any rate, the worst and most unmanageable cases that I have seen had such an origin. I will give a typical case in point.

## CASE IV.

Mrs. M., *set.* 24, mother of one child 5 years old, had been a confirmed invalid since its birth, and had been the subject of much and varied treatment.

I saw her first in consultation with Dr. Mallam, her family doctor, and Dr. MacLaurin on June 17th, 1886. Both the physical and nervous symptoms were well marked, *viz.*, severe pains in the ovarian regions radiating to the back, hips, groins and thighs; these were greatly intensified during menstruation or attempts at copulation. Long continued suffering and nervous irritation had produced their evil effects upon the digestive and assimilating systems, and in this way had facilitated the development of a host of anomalous nervous symptoms which overshadowed, to some extent, the true nature of the case.

Inspection and palpation threw very little light on the case, but a vaginal examination combined with the conjoined touch were more successful. The uterus was fairly central in position, but had descended to a much lower level than normal, and was painfully sensitive to manipulation. The right ovary was much enlarged and firmly fixed within the true pelvis; the right broad ligament was condensed, indurated and exquisitely sensitive. The left ovary could not be made out satisfactory, but over the left obturator foramen there was a fixed sensitive body which was assumed to be the left ovary imbedded in plastic lymph.

The prognosis did not appear very hopeful. It was, however, quite certain that little or nothing further could be expected from medical treatment however well directed, and the difficulties to be encountered by surgical interference appeared somewhat formidable. Indeed the case belonged to a class that can only be undertaken as a matter of duty.

I placed before the patient and her friends, as clearly as I could, the certain risks and the probable advantages of surgical interference, and, after a few days' consideration, the patient determined to face the risks.

On June 24th, 1886, I removed both ovaries, the left tube and as much of the right as was possible.

The right broad ligament was much thickened, excessively hyperæmic and covered with a collapsed cyst which had been aspirated some time previously. The right tube was larger than a full sized finger and distended with a creamy-looking fluid—not pus. The fimbriated end was so hyperæmic and closely adherent to the pelvic wall that it was not deemed prudent to separate it (the tube), it was therefore tied in two places and about 3 inches of the middle portion removed. The right ovary was securely anchored in the sacral hollow by strong fibrous bands of old standing, and much care was necessary to separate this organ from its moorings. The left broad ligament and tube were in much the same condition as the right save in the fact that the tube was not adherent. The left ovary was considerably enlarged and imbedded in a mass of condensed lymph attached to the upper margin of the left obturator membrane, from which it had to be enucleated. These several complications prolonged the operation somewhat, and gave rise to more hæmorrhage than is usual, but this was readily controlled by hot water poured into the pelvis.

Before the operation commenced the Temperature was 97.6, Pulse 106, Respiration 30. The temperature gradually advanced until the evening of the 3rd day, when it had reached 100.2: while the pulse had fallen to 96. On the following morning the temperature had fallen to 98.4, pulse to 92, and respirations to 24. From this date the patient made a rapid and satisfactory recovery and has remained absolutely well to the present time.

I may remark that a normal or subnormal temperature appears to be the rule in this class of cases, while the pulse is increased in frequency and decreased in volume.

The ovaries were carefully examined by Dr. McCormick, who reported that they consisted wholly of caseous matter. No trace of normal ovarian tissue could be found in either organ. The history, symptoms, and physical signs clearly implied the necessity for operative interference in this case, and the microscope fully justified the procedure.

## (5) CONGENITAL ABSENCE OF UTERUS AND VAGINA.

There is another class of cases which I must not altogether omit to notice, *viz.*, cases of congenital absence of the uterus and vagina, while the ovaries and the external genitalia are exceedingly well developed.

It is held by some excellent authors that a rudimentary uterus and vagina are often associated with a similar condition of the ovaries and external genitalia, but such is not my experience. While I have seen a goodly number of cases where the uterus and vagina were either altogether absent or only represented by the merest rudimentary outline, I have not seen a single instance where they were associated with rudimentary ovaries. On the contrary, where the uterus and vagina were either altogether absent or very rudimentary, the ovaries and external genitalia were unusually well developed—indeed, I have more than once seen a rudimentary uterus and vagina tacked on to a bust of exquisite elegance and grace.

The only prominent symptom characterizing this anomaly, in many cases, is the non-appearance of menstruation at the usual time, which is frequently referred to imaginary causes. When the girl arrives at 16 or 17, and there is still no attempt at menstruation beyond occasional local pains, she is either altogether neglected or she is taken to some medical man who does not trouble himself to ascertain the real cause, but seeing a girl in apparent good health, he dismisses the case with the assurance that "all will come right after marriage."

The following case is a fair example of what I mean:—A.B., the daughter of a medical man. When 17 her father was anxious about her, as menstruation had not appeared, although she was in apparent robust health. He took her to a medical friend, who assured him there was nothing amiss, and that marriage would put all things right.

On the faith of this assurance the girl was, in due time, allowed to marry, when it was found, but too late, that sexual congress was impossible. Both husband and wife, being young beginners, they persevered with an energy worthy of a better cause. The consequences of such persevering and oft-repeated efforts were acute ovaritis and abscess, which necessitated the ultimate removal of those choice gifts of nature. I will very briefly record a case illustrative of the mischievous effects of professional carelessness in this class of cases.

J.G., aged 27, married 5 years, never menstruated, but was in good general health previous to marriage. She had been taken to several medical men during her maidenhood respecting her amenorrhœa, and had taken different kinds of medicine, but had never been submitted to an examination. She had always been assured that "when she married all would be right," and with such assurance she and her friends were satisfied. At 22 she married and copulation was found to be a failure, but as neither she nor her husband understood the reason, they attributed their want of success to their defective knowledge in such

complicated matters, and they patiently persevered in their praiseworthy efforts, but always failed.

After some months of this patient persevering, she began to suffer from "inward convulsions," which always appeared to begin in the abdomen and would continue, with more or less severity, for several hours, accompanied with severe headache, nausea, and not unfrequently with vomiting. These attacks increased both in frequency and severity until her general health broke down altogether. During the five years of married life which had passed previous to my seeing her, she had been under medical care from time to time, and had been temporarily benefitted, but had never been examined as to the condition of her genital apparatus.

Two years ago she first came under my care in consequence of the rapid increase of the convulsive attacks already mentioned. She was thin and old-looking, with a facial expression indicative of much mental and physical suffering. She complained of severe and continued pain in both ovarian regions, especially the left, which was so much intensified when any attempt was made at copulation that the practice had been altogether abandoned. The vagina was represented by a *cul-de-sac* about two inches in depth and triangular in outline. The apex, being directed upwards and forwards, was occupied by the urethra, which was soft and elastic. There is every reason for believing that this *cul-de-sac* had been manufactured by long continued sexual effort. The urethra had in this way, doubtless, been pushed from its original into its present unnatural position, and it is far more than probable that it had assumed new functions, playing the part of a vicarious vagina; but whether it had ever been penetrated by the virile organ could not with certainty be ascertained. The rectal sphincter was also very soft and lax.

In this case I removed both ovaries. The right ovary was very much enlarged and undergoing cystic degeneration. The left was much smaller than normal; its cortical substance was unusually hard and condensed, while its medullary substance was closely compressed and apparently atrophied.

I have frequently noticed that ovarian atrophy is associated with excessive sensibility of the organ so affected, and this is in all probability due to compression of the medullary substance by the contracting cortical capsule.

This patient made an excellent recovery and left the hospital a month after the operation.

Eighteen months after she left the hospital I wrote to her to know how she was getting on, and in reply I received the following letter:—

"Myall River, Dec. 3, 1888.

Dear Sir,— Your note I received this morning. Many thanks for your kind inquiries. I am pleased to say I have never known one moment's suffering since leaving the hospital 18 months ago, being perfectly cured. I am strong and robust, thoroughly enjoying health and life. I feel ever indebted to you for your kindness, care, and attention. I will call and see you during the New Year holidays, being then homeward bound, after two months' change.

Once more thanking you for kindness that can never be forgotten,

I remain, yours sincerely,

\_\_\_\_\_."

This patient called according to her promise, and her healthy appearance fully confirmed the statements made in her letter. I did not examine her, but she told me that sexual congress was not only possible but quite satisfactory. I therefore infer that the virile

organ penetrates the urethra, and that the bladder does double duty. She has complete command over the urethra.

This is a fair type of the cases I have seen of this class, both before and after operation. I am quite satisfied that a girl, who has never menstruated, should not be allowed to marry without a careful examination of the genital apparatus.

I fully intended to notice, however briefly, the inflammatory affections of the tubes, but time forbids. This I must defer to another occasion. I will now close this address with a few general remarks, and (1) with respect to the mode of operating, I may say that I am decidedly in favour of the abdominal method. The operation is simple enough when you have acquired the habit; but to a new beginner it is neither simple nor particularly easy. It is not always easy to find the peritoneum, and often much less so to find the object of your search when you have entered the cavity. But this is simplified by "spotting" the uterine fundus with the index finger, from whence it may be passed along the tube until the ovary is reached. It is never necessary to introduce more than two fingers, between which the ovary may be gently drawn through the incision, accompanied by the tube, when both can be deliberately examined and removed, if necessary. Some one may ask, perhaps, should both appendages be removed? There may be exceptions to the rule, certainly, but as a rule, where degenerative changes have existed sufficiently long to necessitate the removal of one appendage, it will seldom be desirable to leave its fellow behind. If it is the object sought in undertaking the operation will seldom or never be attained.

The peritoneal opening should be large enough to admit two fingers without force. There may, of course, be exceptions to this rule, but they will be few indeed. Drainage is much less frequently necessary in oophorectomy than in ovariectomy. I have not had occasion to use the drainage tube at all in this series of fifty cases. Antiseptics I have abandoned for several years, substituting careful personal supervision and scrupulous cleanliness.

Oophorectomy has only once proved fatal in my hands, and that case was complicated with ovarian varicocele, which, previous to the incision, had been mistaken for an ovarian cyst. It suddenly burst while being drawn through the incision, and the pelvis was filled with blood in an instant. The patient rallied fairly well, but ultimately collapsed and died, apparently from shock. This is the only case of ovarian varicocele I have seen, and the only fatal case of oophorectomy I have had.

It is the opinion of some of our confrères that a woman is unsexed if her uterine appendages are removed. Now, if unsexing means incapacity for child-bearing, there can be no question as to the correctness of such an opinion; but if it means incapacity for sexual life, in all the fullness of its wonted vigour, then I am bound to say that such an opinion is unsupported by observed facts. On the contrary, instead of the sexual sense being destroyed it is often greatly intensified in women who, previous to the operation, were total strangers to sexual satisfaction or even to sexual desire.

Again, it used to be the general impression that the comeliness of woman depends on the possession of her ovaries, and that the removal of these precious gifts of nature would reduce her to a coarse form of masculine humanity, with diminished breasts, coarse voice and offensive beard; but this impression is not confirmed by extended experience. On the contrary, the comeli-

ness and grace of the female form lose nothing by the operation, both are increased rather than diminished.

In conclusion, I may remark that this operation may be, and has been, undertaken for the relief of two classes of sufferers, viz., those who suffer from functional disorder, and those who are the victims of organic disease. In the former class I believe it to be at least useless, if nothing worse; while in the latter class it would not be possible to say too much in its favour, although the operation may be, and has been, greatly abused. But while expressing so positive an opinion, I would say, be on your guard lest you be tempted to operate too early, before all reasonable measures have been tried and found wanting. If you resolutely regard the operation as a last resource, and only to be undertaken when absolutely necessary, you cannot greatly err; and relief may accrue to the suffering and the wretched, who would otherwise be deprived of all hope of personal, domestic, or social comfort or enjoyment.

From these remarks you will readily infer that we have yet much to learn, not only about the operation itself, but also about the class of cases it is specially destined to relieve. So we must, as we have opportunity, each in his own way, do our little part towards their elucidation. And in doing so, we must aim at truth, as distinguished from opinion or from anything capable of change—that something which is alike to all whether we have opinions or not. This power of seeking after truth is the grandest prerogative of our nature, and although it necessarily implies self-denying labour, we must always bear in mind that men value most that which has cost them most. "If," says a philosopher, "I held truth captive in my hand, I should open my hand and let it fly, that I might again pursue and catch it." "Did," says another, "the Almighty hold in His right hand truth, and in His left hand the search after truth, and deign to tender me the one I might prefer, I should in all humility, but without hesitation, request the search after truth." If you—the younger members of this branch I mean—will begin your professional life in this spirit, you may rest assured that your labours will be attended by results of no mean order, however few may be your opportunities or small your apparent aptitude for scientific research. Always

Remember every soul He made  
So different—has some deed to do,  
Some work to work; be undismayed—  
Though thine be humble, do it too.

TABLE OF RESULTS OF 50 CASES OF  
OÖPHORECTOMY.

Disease.	No. of Operations.	Cured.	Greatly Relieved.	Died.
Ovarian Prolapse ...	11	10	1	...
Menstrual Epilepsy ...	6	4	2	...
Uterine Fibroids ...	10	9	1	...
Chronic Ovaritis ...	11	9	1	1
Congenital Absence of Uterus and Vagina.	4	4	...	...
Salpingitis with Fluid in the Tubes.	8	8	...	...
	50	44	5*	1†

\* There is every reason for believing these will ultimately be completely cured.

† This case was complicated, with a large tubal-ovarian varicocele, which suddenly burst while being drawn through the incision.

DR. SYDNEY JONES proposed a vote of thanks to Dr Chambers for his address, and said that he (Dr. Jones) had listened with great interest to the address, especially to the latter portion referring to the different cases enumerated by Dr. Chambers.

DR. MILFORD seconded the motion, and said that it was a long time since he (Dr. Milford) had had the pleasure of addressing the members of this Branch, and he could not have a more opportune time for breaking the silence than in seconding the vote of thanks to his esteemed friend, Dr. Chambers, for his valuable address.

MR. G. T. HANKINS read the Financial Statement which showed a balance of £124 14s. 9d. to the credit of the Branch.

DR. SCOT SKIRVING moved the adoption of the Balance Sheet.

The HON. J. M. CREED seconded the motion, and said that great credit was due to Mr. Hankins for the trouble he had taken to get the accounts into proper order. No Hon. Treasurer had ever had so much trouble over the accounts as Mr. Hankins, and now when he was retiring from the position of Treasurer there was not a single outstanding subscription. A word of praise was also due to Dr. Scot Skirving for the able manner in which he had carried out the duties of Hon. Secretary during the year.

The following gentlemen were elected the Office-bearers and Council for the ensuing year:—President, Dr. Fiaschi; Vice-president, G. T. Hankins, Esq., M.R.C.S.; Hon. Treasurer, Dr. Crago; Hon. Secretary, Dr. Scot Skirving; Councillors, Drs. Knaggs, Chambers, W. W. O'Reilly, Quaife, Worrall, Sydney Jones; Auditors, Drs. Clubbe and Ellis.

DR. SYDNEY JONES exhibited a specimen.

#### SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

At the meeting held on the last Thursday in November, 1888, there was present the President (Dr. Stirling), Dr. Corbin, Mitchell, Mackintosh, Cookson, Clindening, London, Cawley, Giles, Stewart, Hayward, and the Secretary. It was determined, owing to the absence of Drs. Verco and Swift, the contributors of papers, to adjourn.

Ordinary monthly meeting, held at the Adelaide Hospital, at 8.30 p.m., on Thursday, February 28th.

Present—The President (Dr. Stirling), Drs. Clindening, London, Marten, Gardner, Cleland, Corbin, W. Robertson, Cawley, Ewbank, A. A. Hamilton, Stewart, Aitken, Cookson, Hayward, Swift, C. W. Hamilton, Lawrence, Symons and the Hon. Sec. (Dr. Poulton).

The minutes of the previous meeting were read and confirmed.

DR. GARDNER gave notice of the following motion:—"That the council of this branch take into immediate consideration the best manner and method of publishing its proceedings with the view of altering the present arrangements for publication by the *Australasian Medical Gazette*."

DR. GARDNER moved that this branch of the British Medical Association records its keen appreciation of the courtesy, kindness and profuse hospitality extended to its representatives at the recent session of the Intercolonial Medical Congress by the executive committee, and by individual members of congress resident in Melbourne.

The motion was seconded by Dr. Hayward, and carried unanimously.

DR. LONDON exhibited a boy, aged three years, whose hip had been excised by Hüter's anterior incision about six months ago. The wound had healed satisfactorily, and there was free movement of the joint.

DR. GARDNER showed a man who had undergone gastrostomy for malignant oesophageal stenosis, and who was now fed regularly through the resulting gastric fistula; also a male aboriginal native, the last of the Adelaide tribe, who exhibited strongly marked keloid scars at the sites of numerous skin incisions, made early in life in accordance with a well-known tribal custom, and a keloid growth of the auricle, from which Dr. Gardner had some time ago removed a pedunculated growth, also a congenital sebaceous tumour of the tongue which had simulated ranula.

The PRESIDENT read a letter from Dr. Addison which was ordered to be sent to the Secretary of the Medical Benevolent Fund.

DR. SWIFT read a paper on "Tracheotomy in Diphtheria," and Dr. Hayward read a paper on "Three Cases of Diphtheria with remarks;" both these papers are published in this issue.

After the President and Dr. Cookson had spoken to the subject, it was decided, on the motion of Dr. Lendon, to adjourn the discussion to the March meeting.

#### PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners by the respective Boards:—

##### NEW SOUTH WALES.

Douglas, Alfred William, L.R.C.S. Edin., 1888; L.R.C.P. Edin., 1888; L.F.P.S. Glasg., 1888.  
 Bechag, Albert Jobson, M.B. Edin., 1887; M.S. Edin., 1887.  
 Macgregor, Robert Donald, M.B. Edin., 1880; M.S. Edin., 1880.  
 Baker, William Henry, M.R.C.S. Eng., 1886; L.R.C.P. Lond., 1886.  
 Eagar, Francis Sidley, L.R.C.S. Edin., 1884; L.R.C.P. Edin., 1884.  
 Lovibond, Charles Forest, L.R.C.P. Edin., 1888; L.R.C.S. Edin., 1888; L.F.P.S. Glasg., 1888.  
 Meredith, John Baldwin, L.R.C.P. Edin., 1888; L.R.C.S. Edin., 1888; L.F.P.S. Glasg., 1888.

##### NEW ZEALAND.

Sylvester, Harold Augustus, M.R.C.S.E., L.R.C.P. Lond.

##### QUEENSLAND.

James, David Philip, M.R.C.S. Eng., 1871; F.R.C.S. Eng., 1887; L.R.C.P. Lond., 1886.  
 Dods, James, L.R.C.P. et R.C.S. Edin., 1865.

##### TASMANIA.

Gibson, George Harry, M.B. et Ch.M. Edin., 1887.  
 Shells, William Francis Michael, M.R.C.S.E., L.R.C.P. Lond., 1888.

##### VICTORIA.

Cameron, William Johnstone, M.B. et Ch.M. 1885.  
 Birchall, Thomas Barrow, M.B. et Ch.M. Glas., 1879.  
 Wheeler, Edward Henry, L. et L.Mid. K.Q.C.P. Irel., 1887.  
 Kenny, Frederick Hamilton, L.S.A. Lond., 1881; M.R.C.S. Eng., 1883.  
 Reid, Robert George, L. et L.Mid. R.C.P. et R.C.S. Edin., 1888; L.F.P.S. Glas., 1888.  
 Goodall, Charles E., Ch.B. Melb., 1887.

MR. BRUCK has received a full supply of Cassell's Year Book of Treatment for 1889, published at 5s, postage 6d. to all the colonies without exception.

#### NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castle-reagh Street, Sydney.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, MARCH 15, 1889.

#### EDITORIALS.

### THE NECESSITY FOR LEGISLATION FOR HEALTH IN NEW SOUTH WALES.

ON the assembling of the new Parliament of New South Wales, a report on an outbreak of typhoid fever in the municipalities of Newtown and Macdonaldtown was laid on the table. It is made by Dr. Ashburton Thompson and Mr. G. H. Stayton, M. Inst. C.E., lately of the Sewerage Branch of the Department of Public Works; and it reveals, in describing the case which caused the Minister for Public Works to call for it, a striking instance of the deadly effects of unintelligent or fraudulent house-building, and of the perfunctory performance by municipal councils of the duties imposed upon them by law. It is well that this example should thus be given in detail, and with authority. But similar instances must be known to many of the profession who read these lines, and it is at all events unnecessary to repeat here what is accessible to any person who feels sufficiently interested in the subject to procure the report itself. We purpose, therefore, to touch upon another part of this important document, which is, in fact, a practical treatise upon typhoid fever, and its prevention. Its interest is far from being confined to Sydney; on the contrary, it extends to every considerable town in New South Wales—it may be added, to every centre of population on this side of the globe.

After the case upon which the report is founded has been related, the cause of typhoid is mentioned in accurate but popular terms, and such information concerning its life history is supplied as is necessary to throw light upon the conditions under which the disease spreads. The view taken is that which is generally accepted, and is

summarized in the following sentence:—"The poison of typhoid is derived always from the bodies of persons suffering from this fever; it is cast off in the bowel excretions of such persons; it can increase in accumulations of human excreta, and in water to which it finds access; then, either by way of air or water (or, in gross cases, food) it does pass to the bodies of healthy persons; and there it renews its vigour, increases vastly, is thrown off by the bowels again in large quantity, and so, after re-entering air or water, passes to man again in unbroken series." Those who may feel inclined to take exception to the exclusive character of this statement are requested to consider a passage in the *Geographical and Historical Pathology of Hirsch*, from which it appears that they must reckon with that distinguished epidemiologist rather than with the writer. No well-informed physician, however, will be found to deny that the cycle described constitutes the true and usual explanation of typhoid epidemics, although a few isolated cases may seem at first sight to contradict it.

A considerable amount of space is devoted to the subject of ground-air and ground-water, because "the facts of house life everywhere observable in Sydney—and not in Sydney or New South Wales alone, but in Australasia—show that it is either not generally understood, or else neglected." This section is headed, "Of the means by which typhoid spreads," and the vehicles which carry the poison is are named. These are water, air and food, and the relative importance assigned them is that indicated by the order in which they are mentioned. Having thus far dealt with the subject in general terms, cases illustrating the modes of spread are given. There are seven interesting examples of spread through air, in nearly all of which five or more persons in a household were attacked; and there are six examples of spread through water, among which are included the outbreaks associated with milk at *Leichhardt* and at *St. Leonards*. All of these illustrations, as well as others referred to below, are selected from reports made by *Dr. Ashburton Thompson* during the four or five years he has worked in New South Wales, and they have all the cogency which such examples possess when they are adduced to the people among whom they occurred. Instances drawn from other parts of the world are given only when local circumstances do not furnish the required train of events. After this description and illustration of the cause and modes of spread of typhoid fever, the share taken by other kinds of filth in facilitating its attacks is dealt with. Following a general account of the well-known effects upon health which respiration of air befouled by putrescent organic matter has,

concrete examples are given. From these, it appears that the levelling up of rough and unsuitable plots of land with garbage is a common practice, and it is noteworthy that it is followed not in poor neighbourhoods alone. A case is mentioned in which houses estimated to rent at not less than £150 a year are planted in house refuse. No doubt in a document of the kind now under review it is necessary to quote chapter and verse for the several statements made, but that garbage is looked upon in New South Wales generally as a harmless, useful, and economical substitute for clean earth, is surely notorious. In a concluding section, certain steps are described which are considered necessary to prevent the continuance of typhoid fever among the people. Those who have read the foregoing parts of the report cannot fail to see the reason for all of them, and their indispensable character. They will be found, given at length, in another column.

The manner in which this report is planned may be mentioned with approval; this, obviously, is on the principle that explanation and instruction should precede demands for legislative powers. It can scarcely be doubted that much of the opposition with which some measures designed to improve the public health have met is due to failure to understand their importance, and to ignorance of the facts of life in which they have had their origin. In the present case, this obstacle must be taken to be removed. The etiology of typhoid is described in terms which any intelligent reader can understand, and the consequence of disregarding the natural facts which constitute that etiology is shown, not by reference to experience in other countries, but by laboriously collected and carefully described occurrences in the very towns and among the very people whose interests the Assembly of New South Wales is shortly to be asked to protect. From minutes attached to this report, it appears that the last and the present Ministers for Public Works are deeply interested in the matter and firmly convinced of its urgency. They are to be warmly congratulated upon the clear terms in which they both declare that enactment of the necessary remedial measures is an undertaking entirely outside the sphere of party politics; and it cannot be doubted that the universal desire of all thinking men in the community is that they may be liberally supported in this view on both sides of the House. They may reckon, at all events, upon the hearty support of all members of the medical profession and of all ministers of religion, and this should count for not a little. Two bills, it is hoped, will be introduced: One, which bears upon the first recommendation of the report, has to do with sewerage, and provides, among many other things,



for the proper construction of house-connections. This will be drafted in the Department of Public Works. The other six recommendations are stated in a minute by the Under-Secretary for Public Works to fall rather within the province of the Board of Health, and accordingly the latter is requested to draft a bill embodying them. It will be seen that all the recommendations are made with the distinctive character of typhoid as a disease of locality in view; and although if all the powers demanded and shown to be necessary by this local character were granted the prevalence of typhoid would undoubtedly be very much reduced, it is not less certain that a general improvement in the public health would at the same time be witnessed as another and direct consequence of their exercise. We shall probably have occasion to revert to this matter on the introduction of the bills foreshadowed; and it will be necessary then to touch upon some incidental parts of the report, from which it must be inferred that the organization to which the promotion of the public health in New South Wales is entrusted is, not so much susceptible of improvement, as waiting to be created.

#### THE DRAFT MEDICAL BILL OF THE NEW ZEALAND MEDICAL ASSOCIATION.

A SHORT time since a bill for the regulation of medical and surgical practice in New Zealand was drafted by the Medical Association of that colony and submitted to the Government for its approval, which was given. To the astonishment of the authors of the bill, however, on re-perusing it they found that clauses had been inserted providing for the annual payment of two guineas by every medical practitioner. As a medical act is for the protection of the public in a far higher degree than of the profession, this proposal is not only extraordinary, but unjust. The excuse which will be made by the suggester of this impost will probably be that it is demanded to provide funds for the working of the act, but as such working is for the general good, its cost should in justice be provided from the general revenue. We all hear of the lamentable state of public poverty in New Zealand, and this suggestion of taxing a particular profession to provide revenue is proof positive either of this impecuniosity, or of an impudent meanness which is as novel as it is unnecessary.

WE have been requested to direct the attention of our readers to an advertisement elsewhere from the New South Wales Board of Health in reference to infectious diseases in dairy premises, etc., to be reported immediately by the medical practitioner attending the case.

#### THE NEW MEDICAL ADVISER TO THE NEW SOUTH WALES GOVERNMENT.

THE Inspector-General of the Insane (Dr. F. N. Manning) has been appointed to the posts of Medical Adviser to the Government and President of the Board of Health, rendered vacant by the nomination of Dr. MacLaurin to the Legislative Council. We believe that this announcement will be received by the profession with surprise. Dr. Manning will hold these positions in conjunction with his present onerous post, which he has occupied with such distinguished credit for twenty years or more. Dr. Ashburton Thompson is to remain, it appears, in the post of Deputy Medical Adviser to the Government which he has occupied with advantage to the country and with credit to himself for the past five years. It is proposed that he shall receive an advance in salary of £100 a year; apparently as a solatium for what he may be inclined to regard as an injustice. The services he has rendered in connection with repeated outbreaks of smallpox are well known. A comparison between the events connected with this disease in Sydney before 1884, and since that date, will lead competent judges to declare that during the latter period very many thousands of pounds have been saved; while the public now regard with equanimity an event which longer ago was the signal for unreasoning panics and for all sorts of extravagant actions. Though believing that undoubtedly Dr. Manning will ably and thoroughly carry out the duties of his new posts to the satisfaction and welfare of the colony, we cannot help regretting that force of circumstances and self-devotion to the public interest almost compelled him to accept posts which will throw an undue strain on the energies of the Inspector General of Insane, and which we are aware were in no way sought by him. Had he not so accepted, the offices would have remained open to the danger of being filled by a person who would, perhaps, only have had the qualification of political influence, when the interests of public health would have been gravely imperilled. Did we possess a voice in the appointment we should without hesitation have pressed the selection of Dr. Ashburton Thompson, who, as chief medical inspector and deputy medical adviser, has already rendered such effective service in almost the same position, and who, according to generally accepted rules of promotion in the public service, was entitled to the post. Were it any other man than Dr. Manning, we should be anxious that, in the multiplicity of duties he now has, there might be neglect of some of them. With him, we only fear that his health may break down under excessive



work, for the interests of the insane must suffer should he be weakened in his capacity for carrying on the duties of the head of the department, having charge of them. In this he is (in Australasia) *facile princeps*, and of our hospitals for the insane—since they have been under his control—the colony may be justly proud.

### THE PREVENTION OF TYPHOID FEVER.

DR. ASHBURTON THOMPSON, deputy medical adviser to the N. S. Wales Government and chief medical inspector to the Board of Health, and Mr. G. H. Stayton, C.E., of the sewerage branch of the Department of Works, in their report on the recent outbreak of typhoid fever in Gowrie-street, Newtown, near Sydney, have come to the following conclusions as regards the possible prevention of typhoid fever:—

"We have no hesitation in saying that the importance of typhoid fever as a drag upon the national prosperity will be very much reduced if the following measures be taken, viz.:—

1. If the Metropolitan Water and Sewerage Act (Sewerage) Amendment Bill, as already prepared, become law; and if the several proposed schemes of sewerage be carried out;

2. If cess-pits be abolished with proper precautions, and pan-closets substituted for them;

3. If the burial of nightsoil in gross or in detail elsewhere than on reserves appointed after inspection be effectually prevented;

4. If power be granted to close wells and sources of foul water on inhabited premises within 100 feet of a water-main, and to make the necessary inquiry and analysis;

5. If it be made illegal to occupy or to continue to occupy any dwelling-house which stands beyond reach of a town water supply and which is not provided with overground storage for rain water in iron tanks in the proportion of (say) 600 gallons to every three rooms or part of three;

6. (a) If the erection of any dwelling-house on made-up ground, or upon ground which is swampy or too low to be effectually drained, be forbidden, except in accordance with conditions expressed in an order issued by the Government on recommendation of its professional officers; (b) if the erection of any dwelling house be forbidden until particulars and plans of the proposed drainage have been submitted, and if occupation be forbidden until all drainage and plumbing work has been inspected and approved; (c) if powers be granted to enter on any premises on which a case of typhoid fever shall have occurred, or shall be reasonably suspected to have occurred, to cause the owner to make all such openings in connection with foundations, drains, cess-pits, closets, &c., and to sink such trial-holes as may seem necessary to ascertain the sanitary state of the premises, and (d) to order and enforce the execution of such remedial measures as appear necessary to prevent continuance of insanitary conditions thereon;

tion with foundations, drains, cess-pits, closets, &c., and to sink such trial-holes as may seem necessary to ascertain the sanitary state of the premises, and (d) to order and enforce the execution of such remedial measures as appear necessary to prevent continuance of insanitary conditions thereon;

7. If by compulsory notification of cases of the infectious fevers the opportunity of distinguishing unhealthy houses and localities be afforded.

J. ASHBURTON THOMPSON, M.D.

GEO. H. STAYTON, M. INST. C.E.

### LETTER TO THE EDITOR.

#### SNAKE-POISON.

(To the Editor of the A. M. Gazette.)

SIR,—Under the above heading, in your issue of last January, John Reid, M.A., M.D., presents in the shape of some old facts what is apparently intended as a sort of conundrum for the readers of the *Gazette*, as the letter appears to have been written with the object of eliciting comments; and as Dr. Reid does not attempt to solve the problem he submits, I will, with your kind permission, try to do so. On the experiments he relates with Cobra poison on dogs it is unnecessary to dwell. If their object was to demonstrate afresh the well-known fatal effects of this poison, they were, though quite unnecessary, certainly very successful; for all the unfortunate canines were speedily dispatched. Side by side with these experiments, Dr. Reid cites from Sir John Forbes' Oriental Memoirs the case of a gardener bitten by a Cobra and rescued, when apparently on the point of death, by a fakir, who for three hours prayed over him, and waved a dagger over the expiring man's head. If this case was the only one of the kind on record, we might well hesitate to believe in its actual occurrence; but I recollect and others have related similar ones, and it is undeniable that snake-bite is occasionally cured in India by such apparently "miraculous" means. Science, however, knows no miracles. If we believe that it is done, the task devolves on us of explaining how it is done, and what "virtue" there is in prayers and the mere waving of a dagger over a man's head. To assume, as Dr. Reid implies, that such cases would have terminated favourably if entirely left to themselves, is merely shirking the task. To accomplish it we must first define the exact pathological condition of a person dying from snake-bite, and then ascertain by what mysterious power these fakirs are able to turn the tide of death in such cases. I have already shown conclusively in these columns and elsewhere that snake-poison causes torpor and paralysis of motor-nerve centres, and that this action is purely dynamic force, but not tissue-destroying. To the next question that suggests itself, whether there is at the disposal of these fakirs or of any human being a force or power capable of rousing the torpid nerve cells into action, a decidedly affirmative answer may be given. So-called "exact" science has until very lately ignored the existence of this force, and I should not have ventured to mention it even in your columns if modern psychological research, both in Europe and America, had not at last enforced a tardy recognition of its existence, thus opening up vast fields of research

hitherto not dreamt of in our materialistic philosophy. Thousands of years before our Christian era it was known to our Aryan ancestors under the Sanskrit name of *akasa*, or the life-principle, the life-giving fluid or medium; and early in this century Baron von Reichenbach demonstrated its existence by a series of most interesting experiments. In a room, from which the faintest ray of light had been excluded, his sensitives or clairvoyants described it as issuing from the tips of his fingers and from his eyes in the form of blueish or yellowish flame-like emanations, and as enveloping his body in a cloud or aura of the same colour. These emanations were further described as differing both in colour and intensity with different individuals introduced into the room. Von Reichenbach also ascertained from these sensitives that emanations similar in appearance were issuing constantly from magnets he presented before them; hence the name of vital or animal magnetism has been given to this force, although Reichenbach himself proposed to call it "Od," a name occurring in ancient books of the Kabala. To this force, which numberless experiments have proven to be communicable without contact, the recovery in the case of snake-bite cited by Dr. Reid must be ascribed. In paralysis not resulting from organic disease and structural change of the nerve-tissue, it is now under the name of massage a recognised and effective remedial agent; but this coarse method of employing it is typical of the imperfect and merely rudimentary knowledge we possess of its vast potencies that will, no doubt, cause it hereafter to become one of the most powerful means of alleviating and curing disease in the hands of the skilful physician when he has become a true healer. By concentrating in the act of prayer all his mental energy and will power on the object he had in view, and mechanically by waving his dagger over the dying gardener's head, Lullaby, the operator in the case referred to, threw his own "*akasa*" into the man's body, and caused the torpid nerve-cells to resume their proper function in the same way, but only more slowly and less surely than a few hypodermic injections of *Liq. Strychniæ* would have done. In conclusion, Dr. Reid must excuse my expressing dissent from him, when he writes: "If this" (namely, recovery) is the natural course of snake-bite (without stimulants, etc.), it bears out Travers, when he says, 'that sleep will kill where alcohol destroys.' My own experience has forced on me the conclusion that the natural course of snake-bite invariably is death, if the poison is absorbed in ordinary quantity, and not checked and counteracted. The 24,000 victims of it last year in India, according to official records, are also a terrible proof in point. In the quotation from Travers surely the word "save or restore" should stand for kill, as the man was restored during, or as Dr. Reid seems to imply, by his sleep, as the words otherwise do not apply at all. Finally, as to alcoholic stimulants in snake-bite, I quite agree with Dr. Reid. They are useless in small quantities; worse than useless in large ones; and I never administer them except in the stage of recovery, and then very moderately.

Yours truly,

A. MUELLER, M.D.

Yackandandah, Victoria, Feb. 1889.

**NOTICE TO QUEENSLAND SUBSCRIBERS.**—Having learned that a person named John Rattiff, in Brisbane, has been collecting monies on my behalf, I hereby inform subscribers to the *A. M. Gazette* in Queensland, that the said person has no authority to do so, and that his receipt will not be recognised.—L. BRUCK, Publisher *A. M. G.*

## THE MONTH.

### NEW SOUTH WALES.

THE annual report of the Prince Alfred Hospital, Sydney, shows that there were 181 patients remaining in the institution on December 31, 1887. During the year 1888 there had been admitted 2,149 patients, of whom 1,367 had been discharged cured, 345 had been discharged relieved, 135 discharged unrelieved, 281 had died, and on December 31, 1888, 202 remained in the hospital. The average number resident in the hospital during the year had been 198; the rate of mortality over all cases under treatment 12·06, and the number of attendances of out-door patients, including casualty cases, 25,830. The death rate included a number of patients admitted in a hopeless or moribund condition, as well as a great many in the last stage of phthisis, the severity of whose symptoms necessitated admission. It had been found necessary to retain in the hospital for long periods a number of serious chronic cases which required hospital care rather than active treatment. There was an increase of out-patients and casualty cases of 3,060 over the previous year. Of the 2,330 cases treated during the year, 1,260 were surgical and 1,070 medical cases. The average length of residence of patients generally had been 35 days, as against 28·6 the previous year. Of the patients admitted into the general wards there were 858 who contributed more or less towards their support in the hospital, 760 were admitted under Government vouchers and 531 cases of accident and urgency were received free of charge. Eighteen patients were treated in the Ogilvie and Fairfax private wards. The number of cases of typhoid fever treated during the year had been 202, being 42 in excess of the previous year. The average rate of mortality among typhoid cases had been 17·82, which was higher than the previous year, and the rate had been affected by the facts that severe cases had been taken to the metropolitan hospitals instead of to the Coast Hospital, that a considerable proportion of the cases admitted had been severe and in an advanced stage of the disease, and that the frequency of visiting days had a marked injurious effect upon typhoid patients. Owing to the high hygienic condition of the hospital and the excellent nursing of the patients there had been no instance of the disease having been communicated to another patient.

THE number of patients admitted into the Sydney Hospital from January 1 to December 31, 1888, had been 3,050, an increase over the previous year of 538. Of these 1,727 were surgical and 1,323 medical cases; 2,149 were males, 901 were females. The number of accident and urgent cases admitted was 1,225. The number of accident and urgent cases attended to by the resident medical staff, but not admitted, had been 4,124, an increase over the previous year of 295. The number of patients treated at the outdoor ophthalmic department for the year ended December 31, 1888, had been 524; at the ear, nose and throat department, 308; at the outdoor department for diseases peculiar to women, 361. The number of deaths during the year had been 359, viz., 272 males and 87 females. Of these 128 died within 48 hours of admission, and many others were admitted in a hopelessly diseased or maimed condition, for whom all the best efforts of the institution were employed to alleviate their sufferings. The number of cases treated by the district surgeon in connection with the dispensary was 7,481. Of these, 498 were visited at their own homes.

THE unsafe state of the Sydney Hospital was, at the annual meeting of subscribers, held on February 26, commented on by his Excellency the Governor in the course of his reply to a vote of thanks for presiding. Lord Carrington quoted from a report submitted to him that morning by Superintendent Bear. The report pointed out that the structure, being built upon piers, would, in the event of a fire occurring, provide such a draught that the building would be down in ten minutes, and the patients, before they could be got out, would be roasted alive. Speaking as a citizen, his Excellency said that if by the next annual meeting something was not done he would not give it his support or be present upon such an occasion.

A NEW hospital for consumptive patients and those suffering from lung and chest diseases was opened at Parramatta by Cardinal Moran on March 5. The building, which contains 50 beds, is constructed in accordance with most modern ideas. It is under the care of the Sisters of Charity of St. Vincent's Hospital, Sydney, and is open to patients of all denominations.

LORD CARRINGTON laid the foundation stone of the Berrima District Cottage Hospital, Bowral, on February 9, in the presence of about 700 persons. £160 was laid on the stone.

ON February 18, Lord Carrington laid the foundation stone of the new hospital for convalescents, to be erected at a cost of £16,300 on the Estate at Grasmere, near Camden, presented to the Government by Mr. Paling some months ago.

SIXTY medical students attended the practice of the Prince Alfred Hospital, Sydney, during the year 1888.

AN alarming outbreak of typhoid fever has occurred at Balranald, on the Murrumbidgee river, 554 miles S.W. of Sydney. On February 26 there were 22 patients in the hospital, and 24 were being treated at their private residences, the total number of cases since the outbreak in November last being 70, or 1 to every 8 inhabitants. Five deaths have already occurred. The Government have despatched seven nurses and another medical man to assist Dr. Lawson, the hospital surgeon, during the epidemic.

TYPHOID fever has lately been very prevalent at Moree, 390 miles N.W. of Sydney.

A MALE patient died at the Sydney Hospital on February 6 while under the influence of chloroform. At the coroner's inquest, held the next day, Dr. Fisher, one of the resident medical officers, stated that it was very doubtful whether the deceased died from the effects of the anæsthetic at all. To his mind the man had a fit of an epileptic nature previous to any dangerous symptoms having set in. Dr. Goode deposed to having made a post mortem examination of the body, which revealed the cause of death to have been extravasation of blood in the brain substance. The anæsthetic had nothing whatever to do with the decease of the man. The jury found in accordance with this testimony, and added that due care and caution had been exercised in the administration of the anæsthetic.

DR. GEORGE DUNCAN, M.D. and L.R.C.S., Edin. 1843, retired fleet surgeon, R.N., died at Llangallen, Summerhill, near Sydney, on February 22, in his 69th year.

MR. JOHN LEONARD, M.R.C.S. Eng., 1873, died at his residence, Redfern-street, Redfern (Sydney), on February 7, in his 41st year.

THE residents of West Maitland propose to erect a drinking fountain opposite the new Town Hall to perpetuate the memory of the late Dr. R. J. Pierce.

DR. F. NORTON MANNING, Inspector General of the Insane in N. S. Wales, in addition to his present duties, has accepted the position of Medical Adviser to the Government and President of the Board of Health in the place of the Hon. Dr. H. N. MacLaurin, M.L.C., resigned.

DR. BEEHAG has commenced practice at 6 Lyons-terrace, Sydney, as a specialist for diseases of the ear, nose and throat.

DR. F. M. BROWN has been appointed honorary captain of the Cootamundra Reserve Rifle Company, and Dr. R. B. Warren honorary captain of the Camden Reserve Rifle Company.

ON February 2, Dr. Walter Brown and family were accorded a public leave-taking at the Town Hall, Parramatta, prior to their departure for Europe. Musical selections were given by the Parramatta Liedertafel, and an illuminated address and cheque for £180 were presented to Dr. Brown by Archdeacon Gunther on behalf of his friends. Dr. Brown sailed on March 2.

DR. C. S. GIBBONS, late of Lithgow, has commenced practice at Drummoyne, a suburb of Sydney.

DR. S. J. R. GREVILLE has commenced practice at Albury.

DR. A. J. HARWOOD has commenced practice at Burwood, a suburb of Sydney.

DR. WALTER HULL has been elected Resident Medical Superintendent of the Sydney Hospital; the salary is £500 per annum and quarters.

DR. H. N. MACLAURIN, Medical Adviser to the Government, has been appointed a member of the Legislative Council of N.S. Wales.

DR. E. E. A. MAHONEY has removed from Crookwell to Wagga Wagga.

DR. JOHN OLIVER, late of Caulfield (Vic.), has settled at Walgett, where he has been appointed Surgeon to the local hospital.

DR. W. H. TIBBITS, of Manly, near Sydney, has left for England by the "Orizaba" on a six months' trip. During his absence Dr. D. R. Edwards will carry on his practice.

#### NEW ZEALAND.

FORTY-ONE male and twenty-five female attendants have left the Sunnyside Asylum, Christchurch, during the past twelve months.

THE death is announced of Mr. William Stockwell, L.R.C.S. Ed., 1853, who died at Auckland on March 3. The deceased gentleman arrived in the colony in 1870, and held the appointments of Health Officer at Auckland, and Visiting Surgeon to the Provincial Hospital.

WE understand that Dr. Cremonini, Medical Superintendent of the Auckland Lunatic Asylum, has resigned.

DR. S. J. DENTON has settled at Helensville, 38 miles N.W. of Auckland.

DR. H. A. SYLVESTER, late of Tunbridge (Eng.), has commenced practice at Nelson.

#### QUEENSLAND.

DR. BROWNE, of Bowen, has been elected President of the local Chamber of Commerce.

DR. A. H. MURRAY, of Cunnamulla, has left by the Austral for England on a twelvemonth's holiday. During his absence Dr. A. J. O'Flannagan, late of St. Vincent's Hospital, Sydney, will carry on his practice.

DR. PAUL has been elected Medical Officer of the Barcaldine Hospital in the place of Dr. Willis, who has been presented with a testimonial, signed by everyone in Barcaldine, setting forth that the residents have every confidence in him as a professional gentleman.

#### SOUTH AUSTRALIA.

AT a recent meeting of the Board of Management of the Adelaide Hospital, a letter was read from the Government approving of the Special Committee's recommendations with regard to the appointment of a Medical Superintendent at a salary of £500, and of two House Surgeons and two House Physicians at nominal salaries. The committee are now taking steps to speedily carry out these improvements in the management of the institution.

THE death is announced of Mr. John Auchterlonie Creelman, L.R.C.S. Edin., 1840, who died on February 3, in his 68th year.

DR. E. C. HADEN has removed from Hawker to Waukaringa, 225 miles N. of Adelaide.

#### VICTORIA.

THE Central Board of Health of Victoria have addressed a letter to the Chief Secretary, recommending the appointment of a Medical Inspector and Adviser to the board. The letter stated that such an officer would be a great assistance to the board in cases of typhoid fever and similar diseases. Such officers were employed in England, and their reports were regarded as valuable throughout the world. Hitherto the board had been dependent upon the assistance of Dr. Shields, Government Medical Officer, but, owing to the increase of his duties in other departments, he was unable to devote so much of his time to the requirements of the Board. Applications should be invited both in London and in Victoria from qualified medical men, with some experience of sanitary matters. A salary of £1,000 should be affixed, though less might be accepted at first.

THE committee of the Medical Students' Society have brought under the notice of the Council of the University of Melbourne some facts which seemed to the society to indicate a highly unsatisfactory state of affairs in the Medical School. At the last ordinary examination eighteen candidates entered for senior anatomy, of whom seven only passed. Seventeen entered for regional and applied anatomy, of whom four passed. The students were perfectly satisfied with the fairness of the papers and of the examiners, and they attributed the circumstances that 64 per cent. of the candidates failed to pass to the facts that the supply of bodies for dissection was less than one-half of what was required, necessitating two students to be at work on the same part of one body at the same time; that during the year the work of the demonstrator of anatomy had been largely done by substitutes, and that at present fourth-year students, while nominally free to attend either the medical or surgical practice of a hospital, were practically obliged to choose the latter, and therefore, while studying pathology as one of the subjects of examination in that year, they were unable to attend either *post-mortem* examinations or pathological demonstrations. Their knowledge, therefore, was almost entirely theoretical, and the practical work remained to be done in their fifth year. The committee could not but think that the training of the students, and the reputation and success of the Medical School, were seriously imperilled if matters were allowed to remain in their present state; and it was therefore

respectfully requested that steps should be taken to improve the work in these respects as early as possible in the current year. In the opinion of Dr. Morrison the matters referred to in the communication were of the greatest importance. Many medical students were already leaving for England and elsewhere, in consequence of the inadequate teaching given in this University. The matter has been referred to the Medical Faculty for report and suggestions.

AT the meeting of the Melbourne Hospital Committee, on February 19, the medical superintendent submitted his annual report. It showed that during the past year 4,216 cases had been treated in the institution as against 3,590 the previous year, and this in the face of the fact that in order to give more air-space the number of beds had been reduced. Of these 337 were typhoid cases, and 69 were fatal; 259 were phthisis cases, and 136 were fatal. This extraordinary fatality was explained by the fact that, owing to the limited space, only the most urgent cases could be admitted to the institution, whilst numerous cases which deserved to be admitted had to be refused in consequence of there being no beds available. A discussion ensued as to the necessity and advisability of erecting a new hospital, and it was finally decided that the question of providing more accommodation should be referred to the building committee, and that a deputation should wait upon the Government at an early date, to urge upon them the purchase, for hospital purposes, of the Queen's Coffee Palace in the event of such premises being for sale.

THE report of the Health Officer and Inspector for Ballarat City, upon the dairies supplying the residents with milk shows that a steady improvement is taking place in the dairies generally. The officers visited fifty-five milk houses, and found in many only one cow milking, and at others herds ranging from one to sixty head. Of the fifty-five two are described as dirty, one as very dirty, one very untidy, two as untidy, three fairly clean, three moderately clean, and the rest gauged as "clean" to "very clean and well regulated," and "perfectly clean." The principal fault lay in allowing accumulations of manure, and neglecting proper drainage.

DURING the week ending February 23, 229 cases of typhoid fever were reported to the Victorian Central Board of Health, making a total of 1,358 cases reported from December, 147 of which have been fatal.

THE number of cases of typhoid fever recently reported at Horsham has been 10 per 1,000 inhabitants, and these are attributed by the inspector of the Victorian Central Board of Health to the defilement of the water supply of the town, which is derived from the River Wimmera, which receives the drainage from the town and the faeculent drainage from the Chinese gardens.

WE regret to have to announce the death of Mr. Berkeley Westropp Hutchinson, M.R.C.S. Eng., 1843, who died on February 28, at Alma road, St. Kilda, near Melbourne, aged 74 years. The deceased gentleman landed in Victoria 27 years ago, and for many years he practised at Albury, New South Wales. In 1879 he removed to South Australia, where he practised at Moonta, Kadina, and Wallaroo, as surgeon to the local copper mines, until three years ago, when he retired from practice, and removed to St. Kilda—his last residence. During the famine in Ireland in 1847 and 1848 he acted as physician to the Spiddall and Maycullen fever hospitals.

MR. T. N. FITZGERALD, F.R.C.S.I., President of the late Intercolonial Medical Congress, together with the

members of the committee, have presented a farewell address to the Governor (Sir Henry Loch) prior to his departure by the R.M.S. Arcadia.

DR. M. J. COHN has removed from Sandhurst to Collins-street East, Melbourne.

DR. H. E. ASTLES has been elected Honorary Physician to the Out-patients Department of the Melbourne Hospital.

DR. T. AUBREY BOWEN (of Melbourne) will leave for Europe next month. He intends to stay away till the end of the year.

DR. J. F. JOYCE, of Fitzroy, formerly of Adelaide, is a candidate for Parliamentary honors for the electorate of North Melbourne.

DR. S. D. BIRD, has been elected a member of the Melbourne University Council.

DR. A. L. KENNY, late resident surgeon at the Victorian Eye and Ear Hospital, has commenced practice at Collins-street East, Melbourne, as a specialist for diseases of the eye, ear, nose and throat.

DR. C. C. MCFARLANE has removed from Collins-street to Como-house, between Mentone and Mordialloc, near Melbourne.

DR. G. R. REID, a new arrival, has settled at Nangambie, 80 miles N. of Melbourne.

DR. T. F. RYAN, late of Koroit, has succeeded to the practice of Dr. R. Mead at Kaniva, 313 miles N.W. of Melbourne.

DR. D. TURNER, of Collins-street East, Melbourne, has left on a six months trip to Europe.

#### WESTERN AUSTRALIA.

DR. J. T. LAFFAN, late of Wyndham, Cambridge Gulf, has been appointed to act as Resident Medical Officer, Bunbury, Public Vaccinator for the Urban and Suburban District of Bunbury, and Rural District of Wellington; also Police Magistrate, the Magistrate of the local court, the Sub-Collector of Internal Revenue, and Medical Officer of the Blackwood District; and to be a Vendor of Internal Revenue Stamps.

DR. J. A. O'MEEHAN, late of Bunbury, has been appointed to be Resident Medical Officer, York, and Public Vaccinator for the Urban, Suburban, and Rural District of York, *vice* Dr. J. R. M. Thomson, resigned.

MR. HANNIBAL BURNHAM BRYAN has been registered as a Medical Practitioner for this colony, under "The Medical Ordinance, 1869," on strength of a declaration that he was practising medicine in the colony before the last day of July, 1869.

#### MEDICAL APPOINTMENTS.

Barker, Theodore Hugh, M.B. of Ch.M. Edin., appointed Medical Officer of the Wellington Hospital, N.S.W.

Callaghan, Joseph, L.F.P.S. Glas., L.R.C.P. Ed., elected Medical Officer of the Windsor Hospital, N.S. Wales.

Carstairs, James Grafton, M.D., to be Health Officer for town of Geelong, Vic., *vice* the late E. J. Walshe, M.R.C.S.E.

Charlton, Clifton, M.B. of Ch.M., Edin., to be a Public Vaccinator for the district of Halcombe, N.Z.

Craig, Walter Joseph, M.B. of Ch.B., Melb., appointed resident surgeon at the Melbourne Eye and Ear Hospital, *vice* Dr. J. J. Miller, resigned.

Denton, Samuel James, M.D., New York, to be a Public Vaccinator for the district of Helensville, N.Z.

Gibson, John, M.D. of Ch.M., Edin., to be Government Medical Officer and Vaccinator for the district of Windsor, N.S.W.

Halahan, Samuel Handy, M.B. of Ch. B., Dublin, to be Health Officer for the Central and Western Ridings of shire of Kowree, Vic.

Ludlow, Victor Ethelbert, L.R.C.S.I., L.K.Q.C.P., Irel., to be an additional Vaccinator for the district of Newcastle, N.S.W.

MacDonnell, Ronald, L.K.Q.C.P., Irel., L.R.C.S., Irel., to be Health Officer for the borough of Queenscliff, Vic.

Mackenzie, John Hugh, L.R.C.S., Ed., to be Public Vaccinator for Wodonga, Vic.

Parker, Alfred Henry, L.R.C.P., Ed., to be Health Officer for the shire of Beechworth, Vic., *vice* Dr. H. T. Fox, resigned.

Rogers, William Henry, L.F.P.S. Glas., to be Government Medical Officer and Vaccinator for the district of Greta, N.S.W.

Rooke, Charles, F.R.C.S., Eng., to be Government Medical Officer and Vaccinator for the district of Germanton, N.S.W.

Ross, Bernard Joseph, M.D., to be Health Officer at Macarthur, Vic.

Ryan, Thomas Francis, M.B. Melb., to be Health Officer and Public Vaccinator at Kaniva, Vic., *vice* R. Mead, M.B., resigned.

Willis, George Owen, L.R.C.P. of R.C.S. Edin., F.F.P.S. Glas., to be Government Medical Officer at Barmaldine, Qu.

Thwaites, Johnstone Simon, M.B., Melb., to be Health Officer for shire of Toowoong, Vic.

#### BIRTHS, MARRIAGES AND DEATHS.

\*. The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcement.

##### BIRTHS.

COLLINGWOOD.—February 6, at Bowral, the wife of David Collingwood, M.D., B.S., London, F.R.C.S., of Summerhill, Sydney, of a son.

ENGLISH.—January 22, at Gunning, N. S. Wales, the wife of J. English, L.R.C.P.S. Edin., of a daughter.

LAWRENCE.—On the 5th February, at Brighton, the wife of Dr. O. V. Lawrence, of Fitzroy, Melbourne, of a daughter.

MACDONALD.—February 20, at Ingham, North Queensland, the wife of W. C. C. Macdonald, M.D., of a daughter.

NASH.—February 19, at Wallisend, N. S. Wales, the wife of Dr. J. B. Nash, of a daughter.

OCHILTREE.—On the 3rd February, the wife of Dr Ochiltree, Ballarat, Victoria, of a daughter.

O'DOHERTY.—On the 30th January, at Brisbane, the wife of Dr. R. H. O'Doherty, of a daughter.

QUAIFE.—February 8, 1889, at Woollahra, near Sydney, the wife of William F. Quaife, M.B., of a daughter.

SCOTT.—February 6, at Penrith, N.S.W., the wife of Charles H. Scott, M.B. of Ch.B., of a son.

WEST.—March 2, at "Derby House," Glebe road, Sydney, the wife of W. A. West, L.R.C.S.I., etc., of a son, which only survived its birth a few minutes.

WILLIAMS.—On the 3rd March, at East Melbourne, the wife of Dr. E. Johnson Williams, of a son.

##### MARRIAGES.

BROWN—MACARTHUR.—February 5, at the Church of St. John the Baptist, Ashfield, near Sydney, Walter Sigismund Brown, M.R.C.S., of Parramatta, to Margaret Isabella, elder daughter of the Rev. George F. Macarthur, of Ashfield.

ELLIS—SPEER.—On February 21st, at All Saints', Woollahra, near Sydney, by the Rev. H. Wallace Mort, M.A., Henry A. Ellis, M.B., of Double Bay, to Fannie M. Speer, daughter of William Speer, Woollahra.

LOVIBOND—BAKER.—February 26, at St. Andrew's, North Waratah, near Newcastle, New South Wales, Charles Forrest Lovibond, L.R.C.P., L.R.C.S., etc., to Georgina Baker, sister of Dr. Wiston Baker, of North Waratah.

LUCAS—DRAPER.—On the 31st January, at South Brisbane, by the Rev. Osborne Lilley, Dr. T. B. Lucas, late of Melbourne, to Susan, third daughter of the late Rev. William Draper.

WEEKES—JONES.—February 19, at Cadown, N. S. Wales, by the Rev. R. Barry Brown, Charles J. Weekes, M.R.C.S. Eng., L.R.C.P. Lond., of Lithgow, to Laura Beatrice, fourth daughter of Edward Jones, Esq., of Cadown station, Lachlan River, N.S.W.

##### DEATHS.

LAWSON.—February 16, at Balaclava, New South Wales, Agnes, the wife of G. L. L. Lawson, L.R.C.P. Edin., M.R.C.S. Eng., from typhoid fever, aged 28 years.

MC CARTHY.—On the 14th February, at Footscray, Melbourne, Constance Beatrice, wife of Chas. L. McCarthy, M.B., Ch.B.

FOR TRANSFER.—A medical practice in South Australia, only condition being purchase of doctor's residence. Terms very easy. Climate excellent. Address, A.E., *Australasian Medical Gazette* Office, Sydney.

WE have received from Messrs. L. Barnett and Co., of 29, Jamieson-street, Sydney, a copy of the *London Bridge Diary* for 1889. This diary contains 68 pages of varied and comprehensive information suitable and of interest to both business and private houses, in addition to the usual blank pages of notes, etc., interleaved with blotting paper.

## REPORTED MORTALITY FOR THE MONTH OF JANUARY, 1889.

* Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from										
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.	
N. S. WALES.															
Sydney .....	132,846	319	200	109	1	1	4	...	3	37	16	14	6	1	
Suburbs .....	215,849	801	406	236	2	4	10	2	18	56	23	19	12	6	
NEW ZEALAND.															
Auckland .....	35,639	87	23	10	...	...	...	...	...	5	4	3	1	...	
Christchurch.....	16,455	35	12	3	...	...	...	...	1	1	1	1	1	...	
Dunedin .....	23,546	58	20	4	...	...	...	...	...	...	3	2	...	...	
Wellington .....	29,075	66	30	10	...	...	...	...	...	1	4	2	...	...	
QUEENSLAND.															
Brisbane .....	51,689	217	117	58	}	...	4	4	8	21	9	8	3	1	
Suburbs .....	21,960	126	37	25											
SOUTH AUSTRALIA.....	313,065	868	428	212	...	...	9	...	19	75	25	21	15	...	
Adelaide .....	43,750	75	94	34	...	...	...	...	3	6	13	4	4	...	
TASMANIA.															
Hobart .....	32,167	84	89	50	...	...	1	...	1	13	5	2	2	...	
Launceston .....	20,293	66	57	25	...	...	2	...	2	1	...	1	3	...	
Country Districts.....	93,841	224	77	...	...	...	1	...	2	13	...	...	...	...	
VICTORIA.															
Melbourne .....	69,774	161	162	734	...	...	18	2	71	164	72	44	28	6	
Suburbs .....	275,606	1,225	1,049												

## METEOROLOGICAL OBSERVATIONS FOR JANUARY, 1889.

STATIONS.	THERMOMETER.					Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.			Depth.	Days.		
							Inches			
Adelaide—Lat. 34° 55' 33" S.; Long. 138° 36' E. ....	...	109	75.2	51.1	29.840	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S.; Long. 174° 49' 2" E. ....	142	82	67.8	51	...	...	640	5	68	...
Brisbane—Lat. 27° 28' 3" S.; Long. 153° 16' 15" E. ....	162.7	96	76.5	61.8	29.990	1.232	5	63	N.	...
Christchurch—Lat. 43° 32' 16" S.; Long. 172° 38' 59" E. ....	159	90.6	63.5	43.8	...	...	412	5	63	...
Dunedin—Lat. 45° 52' 11" S.; Long. 170° 31' 11" E. ....	153	86	62.8	43	...	...	438	5	67	...
Hobart—Lat. 42° 53' 32" S.; Long. 147° 22' 20" E. ....	...	91.5	63.3	44	29.875	2.36	13	70	...	...
Launceston—Lat. 41° 30' S.; Long. 147° 14' E. ....	...	89	67.9	45.4	29.924	3.19	12	60	...	...
Melbourne—Lat. 37° 49' 54" S.; Long. 144° 58' 42" E. ....	...	92.2	67.7	49.7	29.862	4.22	11	...	...	...
Sydney—Lat. 33° 51' 41" S.; Long. 151° 11' 49" E. ....	...	102.8	71.9	58.3	29.964	2.10	16	67	N.E.	...
Wellington—Lat. 41° 16' 25" S.; Long. 174° 47' 25" E. ....	139	80	63.8	52	...	2.241	9	77	...	...

# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### ANÆSTHETICS.

BY CHAS. L. LEMPRIERE, M.B., ET CH.M.

EDIN.

THE principal use of Anæsthetics is in surgery for the abolition of pain and to obtain perfect quiet during the operation. Therefore, it is very desirable that the anæsthetic should be given by someone not connected with the operation to be performed, so that his whole attention may be devoted to the proper degree of insensibility and to the careful observation of the condition of the patient. Too much care cannot be taken in the selection and administration of the anæsthetic. It will not now suffice to place a stethoscope momentarily over the cardiac area, produce a small piece of lint and indiscriminately proceed "to give a whiff of chloroform," to every case which may be entrusted to our care.

There are many points both theoretical and practical which the anæsthetist must consider before he begins to administer the particular anæsthetic, viz., the nature and length of the operation, idiosyncrasy and general condition of the patient must be investigated, the dangerous symptoms which are most likely to arise must be carefully thought of; and, lastly the physiological action of the anæsthetic must be thoroughly understood.

By auscultation you gather certain information as to the condition of the heart and lungs, but there are other very important things, such as atheroma of the coronary arteries, idiosyncrasy, and the way in which the shock of the chloroform or the operation may affect the patient, which the cleverest of our physicians are unable to foretell. The above are always a source of anxiety to the anæsthetist; however, he must leave them to chance, and be always on the *qui vive* for the first sign of danger.

The commonest anæsthetics in use are Chloroform, Ether, Nitrous Oxide Gas, and Methylene. These differ materially, both in their effects and mode of administration; but the preparation of the patient is the same for one as all, viz., the recumbent, unrestrained and easy posture should be insisted upon wherever possible. There should be no impediment to free respiration, artificial teeth should be removed, all tight clothing should be avoided, and the stomach and bladder should be empty.

The best time for taking anæsthetics is in the morning.

Why is chloroform more frequently used in this Colony than ether? No doubt on account of its portability, its easy application, its cheapness, less quantity is necessary. The cumbersome apparatus so likely to frighten the patient is not required. Anæsthesia is more quickly produced, and, lastly, ether does not suit the extremes of life, but granting all this, should we not use ether more when we know it is safer in all ordinary cases? It is less dangerous than chloroform, because its undiluted vapour is practically safe, whereas chloroform unless kept below four per cent. of the air breathed, seriously imperils life. Ether is also a direct stimulant to the heart and circulation generally, whereas chloroform is a depressant to both.

For the production of anæsthesia in children chloroform is no doubt the best, because heart lesions are rare in childhood, and when present, are well pronounced, and every other organ is healthy, or supposed to be; therefore the child's chance of standing the chloroform is greater. This is the only reason why it is supposed to be safer in children than in adults. Again, we know the danger of giving ether to a child. There is the irritating effect and the cold produced on the delicate bronchial mucous membrane, which may cause an acute attack of bronchitis or congestion of the lungs; but, still, we see children take mixtures, either the A.C.E. or chloroform and ether, in different proportions, very well. These are generally given by the open method, and do not then cause any bronchial affection.

The well-known A.C.E. Mixture—which is used in preference to pure ether in the hospitals of this colony, has its advantages; but the immunity from danger which the A.C.E. Mixture gives, is not due to the ether or alcohol, but to the dilution of the chloroform, for it is generally given by the open method, and the evaporation of the ether being so rapid its effect is soon lost, and the stimulating effect of the alcohol is so slight that I think it very little use except to dilute the chloroform.



It is well known that when the patient is once properly under the narcotic, a much less quantity of the drug is required to keep him in that state, therefore, if after anæsthesia is once properly produced the chloroform used to continue the anæsthesia were diluted by once or twice its quantity with ether, it would be taken more steadily and more even narcosis would be the result, with greater safety to the patient; but, on no account, must the anæsthetist be less careful or watchful because the chloroform is diluted.

The amount of an anæsthetic required to produce insensibility differs in every case. By some it is supposed to be in proportion to the amount of blood in the person to whom it is administered (Heath's Surgery), so that young children and anæmic persons require less than the full grown and plethoric.

Some people are much more susceptible to the action of chloroform than others. Take, for example, alcoholic subjects. As a rule this class of patients take chloroform badly, and always are a source of anxiety to the anæsthetist. Sometimes, however, they take it very well, up to a certain point, then suddenly you observe the pupils dilate, pallor becomes marked, the pulse is feeble and intermitting, and the breathing becomes very shallow and slow. This state of collapse may happen to the most attentive of us. Therefore, I think it safer to use diluted chloroform as soon as the second or excitement stage is over. For example, with two parts of ether to one part of chloroform.

As we are aware that when the patient is once properly under the influence of the narcotic it does not require anything like the quantity to keep him in that state, as it did to produce the anæsthesia. Again, this class of patient is less sensible to pain, and insensibility is often prolonged; therefore, not so much of the anæsthetic is required after he is once under its influence. We also find that these patients are sometimes very difficult to rouse, and when they do come round, are quite intoxicated, as if they had been drinking to excess.

With respect to the treatment of chloroform poisoning (collapse), I should like to refer the reader to Dr. Benjamin Howard's paper on "How to Raise the Epiglottis in Apnoea," B.M.J., 17/11/88. To raise the epiglottis and get the respiratory passages clear is our first thought, whether the collapse be from syncope or asphyxia. The usual way to do this is by grasping the tongue with a pair of forceps and pulling it forwards, and extending the chin. These two factors are no doubt very important, but Dr. Howard has proved that pulling the tongue forwards does

not raise the epiglottis but inclines more to close it, the only way, he says, is: "To use extreme extension of the head on the vertebral column," by this method there is no need for tongue forceps, except if the tongue has fallen back against the posterior wall of the pharynx, but he says: "If the extension is properly carried out, the tongue will naturally fall on to the arch of the mouth, viz., the hard palate, and so leave respiration free to be carried on in its proper course, through the nose." The safest way, in my opinion is, first, to pull the tongue well forwards, then use the extreme extension. After clearing the air or respiratory passages you ought at once to start artificial respiration. You can, at the same time, raise the legs in order that the blood may gravitate to the trunk and increase the blood pressure there. A sponge, after being dipped in very hot water, placed over the præ-cordia is a very good stimulant to the heart.

Nitrite of Amyl is regarded now-a-days as a nearly certain antidote to chloroform poisoning. According to my experience it is of very little avail when the sensory nervous system is paralyzed. It is not a direct stimulant to the heart, it acts secondarily on it through the dilatation of the vessels of the head and neck, and so reduces the arterial pressure; thus there is less blood supply to the heart muscle itself.

The Nitrite of Amyl method is exactly contrary to the inversion of the patient theory, which increases the arterial pressure by filling the vessels in and near the heart, head, and neck, which nearly always produces a good and rapid result.

Some irritants, such as ammonia, snuff, &c., have been used as stimulants, but are of no avail when sensation is lost.

Fresh air is one of the best stimulants we have; therefore let the patient have as much as possible by opening all doors, windows, &c. Among other measures electrical stimulation of the heart and acupuncture of that viscus are recommended. As to the first of these, its action is doubtful, as it may produce excitation; but, again, it may cause inhibition of the heart muscle, and, when wanted, a battery is seldom at hand. As to acupuncture, I cannot express an opinion, as I have never seen the experiment tried.

The treatment I practice is the recumbent posture, plenty of fresh air, draw the tongue forwards, fully extend the head, raise the legs and persevere with artificial respiration, and apply heat over the præ-cordia.

"Pelham," Toorak Road, South Yarra,  
Melbourne.



## GANGRENE OF THE LUNG.—OPERATION—CURE.

READ BEFORE THE MEDICAL SECTION OF THE  
ROYAL SOCIETY OF NEW SOUTH WALES,  
BY ALFRED SHEWEN, M.D., LOND., PHYSICIAN  
TO THE PRINCE ALFRED HOSPITAL,  
SYDNEY.

THE two cases which I now bring under your notice were under my care in Prince Alfred Hospital. With regard to the first, I may say at once that the diagnosis as to the exact nature of the disease from which the man suffered was uncertain. We could never come to any positive decision as to whether the mischief was gangrene, abscess of lung, or empyema; and, when I have read the notes of the case to you, I think you will agree with me that it is impossible to arrive at a positive opinion. The second case was without question gangrene of the lung. I am largely indebted to Drs. Graham and McAllister for detailed notes and watchful care of the cases.

### CASE I.

J. B., a seaman, aged 28, Scotchman, employed on board one of the small steamers trading between Sydney and Fiji. Whilst his ship was lying at Levuka in September last year, six months previous to his admission to the Prince Alfred Hospital, he was attacked with diarrhoea and vomiting and a dry hacking cough, with sputum consisting of blood and matter. He felt ill, but was not bad enough to lay up altogether, and kept at his work whilst the ship steamed from Levuka to Suva and Noumea and on to Sydney, where he arrived in about ten days. He laid up on board without medical advice whilst in port, although he was coughing and spitting blood and matter all the time, and on the boat resuming her voyage to the islands, as before, he returned to his duties. On the return of the boat to Sydney he found it necessary to give up work and apply for advice. During the next three or four months he appears to have wandered from one practitioner to the other, during which time he lost a great deal of blood from the lungs, until on the 3rd of April last he was admitted to the Atherden Ward of Prince Alfred Hospital. The notes of the case record that on admission he was found to be in a very feeble condition, much blanched from loss of blood, with a constant hacking cough and great dyspnoea, with a sputum consisting of blood and pus, which was not fetid. His condition was very urgent. His tempera-

ture was 101.5°, pulse 118, resp. 42. Physical signs: right chest posteriorly absolutely dull in lower half with absence of breath sounds and vocal fremitus. Rest of chest fairly normal. Exploratory syringe gave us dirty looking non-fetid pus. On the day after his admission, my colleague, Mr. Hankins, was kind enough to open his chest for me by the removal of about 2 in. of a rib just below the angle of scapula. No difficulty was experienced in the operation, but owing to the somewhat doubtful character of the case Mr. Hankins used the utmost care to ascertain whether there were any adhesions between the costal and pulmonary pleurae, previously to opening into the cavity. As a matter of fact, the pleurae were found much thickened and no separation of the two membranes was discoverable. About three-quarters of a pint of thickish dark grey non-fetid pus escaped on the opening being made. When the cavity was explored by means of the finger, ragged carnified tissue could be felt all round, and as far as could be judged by the finger the cavity appeared to be in the lung substance. After the operation two large drainage tubes were inserted, but the cavity was not washed out.

On the day after the operation he looked much better, his tongue was cleaner, temperature had fallen about 2°, and there was hardly any cough. The cavity was washed out, whilst patient was sitting up, with a solution of iodine about the colour of healthy urine.

On the 7th of April, which was three days after the operation, the notes say that there was a quantity of curdy grey non-fetid pus discharged mixed with more or less blood.

April 8th.—Discharge mixed with a good quantity of blood.

April 9th.—Temperature normal within a fraction, pulse 90, resp. 38. Discharge not so blood-stained or profuse.

April 10th.—Profuse discharge of blood-stained slate-coloured fetid pus. Temp. normal, pulse 96, resp. 24. Tasted iodine on washing out cavity.

April 12th.—Temp. normal, discharge slightly fetid, cavity seems to be closing up fast. On syringing out some distress was caused, and patient coughed up a good deal of bright blood.

April 13th.—Temp. normal, pulse 98. Good deal of distress on washing out, patient tasted iodine distinctly, no blood.

April 18th.—Can still taste iodine. Temp. normal, very little cough, appetite good, cavity small.

April 21st.—Smaller tube put in, no cough, very little discharge.

From this date onwards the patient made an uninterrupted recovery, and he was discharged on

the 11th of the following month, fairly hearty and strong, having been in the hospital almost exactly five weeks.

Remarks.—As I have said before, I have some doubt as to the exact nature of the mischief in this man's chest. One point is quite clear, however, viz., that he was not suffering from gangrene of the lung. As far as we could judge, by exploring with the finger, immediately after the operation it was, I think, the general opinion of the staff that the finger went straight into the lung. Carnified bands with irregular hardened walls were met with all round, a condition very unlike that found in an ordinary case of empyema. Then, again, we had a history of hæmoptysis with a copious sputum of the same kind of fluid as was found on opening the chest. A history of hæmoptysis is very unusual, to say the least, in a case of empyema. There was also undoubtedly from the first a free opening between the bronchi and the cavity we had opened into, for the distress which was caused a few days after the operation by washing out the cavity was so great that we had to be content with drainage; also there was no doubt that the man could taste the iodine after the injection. I do not lay so much stress upon this latter fact because in my experience of cases of undoubted empyema patients often taste the iodine after the pleural cavity is washed out. But the amount of distress which was caused by washing out the cavity in this case was far greater than is met with in cases of empyema, where we get a communication between the pleural cavity and a bronchus. Then the man's history points to there having been something very unusual in the case, or why should he have been passed on from one practitioner to another without anything having been done for him; more than one practitioner having told him that there was nothing to be done for him. It is most improbable that the man could have presented the usual signs of empyema when such an opinion was given of his case, for we all know that the diagnosis of a chest half full of fluid does not present any difficulty.

I am inclined to think that the man had been suffering from chronic pneumonia, which resulted in a cavity of a non-tubercular character; that this cavity became distended by the accumulation of pus bringing about the copious sputum and hæmoptysis; but that until the time of his admission to Prince Alfred Hospital neither the quantity of fluid nor its proximity to the walls of the chest had been such as to enable those under whose care he had previously been to come to a diagnosis as to the true character of the case. It is possible also that it may have been a suppurating hydatid of the lung, but there was no sign of hydatid membrane at any time.

## CASE II.

J.S., aged 37, a cook, and a native of Ireland. He was admitted to Prince Alfred Hospital on the 6th of February last with the following history:—About two months previous to admission he caught a severe cold, with rigors, was laid up for three days in bed, his cough being very severe, but there was no rusty sputum and no hæmoptysis. During the next six weeks he got gradually weaker with a hacking cough, which kept him awake at night. His appetite was very poor, and he vomited his food. There was no history of chest trouble in his family.

On admission to the hospital his temperature was 100° F. at night; pulse, 72. There was a constant hacking cough with profuse mucopurulent expectoration, dulness at right base posteriorly, faint tubular breath sound, increased vocal resonance and fremitus and some friction.

On the 8th, two days after admission, his morning temperature was 100.2° F. and his evening temperature 102.6° F. Sweated much at night and cough troublesome, with quantity of mucopurulent expectoration.

On the 10th, the sputum for the first time had an unpleasant odour. The physical signs were dulness at the right base posteriorly as high as the inferior angle of scapula, with faint tubular breathing, rather œgophonic vocal resonance and diminished vocal fremitus. An exploratory needle introduced into the right base gave us slightly blood-stained purulent fluid which did not stink.

About the 14th the sputum became undeniably foetid with the characteristic odour of gangrene of the lung. At the same time the stench of the man's breath began to get almost insufferable. He slept very badly, was falling away very fast, and began to exhibit that peculiar earthy appearance which is so characteristic of gangrene.

On the 20th the physical signs were much the same, viz., dulness at right base with very faint tubular breath sounds. A needle introduced into the right base gave us brownish-yellow, foetid fluid precisely similar to that expectorated. The general condition was much the same.

The ward notes of the 27th of February say:—Temp.: night, 102.2; morning, 99.8; tongue moist, slightly coated, red in parts; pulse, 84, soft and weak; expectoration mucopurulent; cough troublesome at night; perspires profusely; does not look so well to-day; feels weak; appetite fairly good; dulness behind on the right from middle of scapula downward, this dulness becoming absolute just below inferior angle of scapula. Over the upper part of this dulness the breath sounds are harsh, and vocal resonance and fremitus are increased. Below this over the area

of absolute dulness, breath sounds are weak, almost inaudible, with diminished vocal resonance, except at one spot about lin. below the inferior angle of scapula and lin. internal to it, where the breath sounds suddenly became cavernous, and pectoriloquy is present.

On the 29th the ward notes say:—Right back generally dull on percussion, but at angle of scapula and opposite 9th dorsal spine the percussion note is distinctly metallic and tubular like percussing a large iron gas-pipe. Below this area the dulness is absolute. Over this area the respiratory note is distinctly cavernous, whilst above it expiration is prolonged, with mucous râles, and below the breath sound becomes faint and almost absent. The sputum is brownish-green and particularly fetid to-day.

For the next few days things continued much the same, although it was evident the patient was not making any headway against the disease. I was quite certain at this point that we had to do with a genuine case of gangrene; the character of the sputum, the foul, fetid, intensely disagreeable and peculiar character of the odour was unmistakeable. Then there was the evidence of a cavity near the angle of scapula. This, together with the man's appearance, the cold, clammy sweats and earthy skin, left no vestige of doubt in my mind that we had to do with a typical case of gangrene of the lung.

On the 5th of March there was evidence that the cavity at the angle of scapula had filled up, for the cavernous breathing had disappeared, and the dulness had become absolute, with scarcely any vocal fremitus and no vocal resonance except some faint oëgophony. An exploratory needle between the 9th and 10th ribs at the angle of scapula gave a stinking pus. Under these circumstances I thought the only course left open to us to save the man's life was to open up the lung by the removal of a portion of a rib.

On the 7th of March Mr. Hankins saw the patient with me, and it was decided that the operation should be performed at once. The hospital notes of this date say:—Temp. (n.) 102·8, (m.) 99°; tongue moist, slightly coated, reddish, irritable, and denuded of epithelium at parts; pulse, 84, soft; slept very little last night; cough very troublesome; spat up a good deal of fetid, purulent matter; has a good deal of pain; breath sounds rather more amphoric over situation of vomica to-day. In the afternoon Mr. Hankins opened the chest by the removal of about 2in. of the 9th rib just below the angle of scapula. There was no difficulty in the operation, the costal and pulmonary pleuræ being closely adherent and the cavity of the abscess being immediately beneath the pleuræ.

Whatever lung tissue there had been had almost disappeared, and there was no hæmorrhage to speak of. About a pint of horribly stinking pus was evacuated, and when the cavity was explored by the finger, hard, resistant bands with ragged, uneven walls could be felt. There was very little blowing in and out of the opening on respiration. An attempt was made to slowly irrigate the cavity by means of lukewarm boroglyceride, but the patient became very blue and the pulse failed, so the attempt was given up. Two large drainage tubes, each with a calibre of about  $\frac{3}{8}$  of an inch, were left in.

March 8.—Cavity syringed out with boroglyceride; patient sitting up, without causing any distress. Powdered boracic acid dusted into cavity.

March 9.—On removing the tubes it is quite easy to see that the cavity has ragged, sloughy walls; that it is of irregular shape, about 3½ in. deep. The finger cannot be passed upwards or downwards along the chest wall inside the cavity—as can be done in a case of empyema, but is met by the hardened lung tissue. The cavity is irregularly pear-shaped, with the large end inwards. Air rushes in and out, now violently, on coughing. Patient says he feels better.

March 11.—Temp. 102·6° (n), 99·2° (m). Tongue slightly dry, glazed and cracked. Expectoration fetid, discharge fetid.

March 14.—Patient is very weak. Rhonchi all over both lungs. Expectoration more profuse and fetid. About this time I feared we were going to lose our patient, for he became so exceedingly prostrate. But he took plenty of food and a fair amount of stimulants, and he gradually struggled into smoother water. On some days the expectoration and discharge would be almost devoid of fætor, and there would be very little of it; then it would suddenly become profuse and stinking, more especially on the patient coughing violently. It evidently got pocketed somewhere. Nevertheless the cavity gradually got smaller, and the general condition of his lungs improved.

March 17.—Cavity very much contracted, will only admit little finger.

March 20.—Purulent fetid expectorations and discharge when the patient coughs violently. The whole of the right back is dull on percussion, but breath sounds can be heard to extreme base, even below the wound. Sleeps well, appetite good. Temp. 99° (n), 98·4° (m).

March 29.—Patient got up for the first time to-day. Discharge and sputum fearfully offensive on violently coughing. When wound is syringed out fluid appears to go straight through into patient's mouth.

April 4th.—Weight, 8st. 12½lbs.

April 26th—Weight, 9st. 3lbs. Syringing to be stopped as it causes so much irritation. Expectoration and discharge sweet. The cavity is now reduced to a mere canal. The right back is still absolutely dull below wound, but is resonant above. Respiratory murmur is quite distinct to margin of wound, faint, but distinct below wound. There is a marked improvement in patient's general condition.

The communication with the lung by means of the external aperture is very free; air whistles in and out on respiration; in fact expiration and inspiration can be carried on by means of the aperture in the chest wall, the mouth and nose being kept closed. On looking into the wound during respiration, an aperture can be seen, which looks exactly like the cut end of a bronchus; it contracts and dilates suddenly during inspiration and expiration.

April 30.—About this date he became suddenly much worse; his expectoration became more profuse, and the whole of the right axilla, except the extreme apex, became dull on percussion, with faint bronchial breath sounds.

The next night his temperature was 103°, and I much feared that we had another patch of gangrene to deal with. Whatever there was it did not empty into the original canal, for the discharge kept sweet, but the sputum again returned to its original odour, and stank most horribly. However, he struggled through this attack, and on the 16th of May the notes say that there was but little sputum, and that was sweet; his appetite was improving, and he was getting up every day; and the breath sounds in axilla were becoming more natural. After this he made flesh rapidly and on the 25th June weighed 10st 2½lbs.

On the 9th of July he had gained 3lbs., and on the 19th of July the ward notes say that he was able to work about the ward. From this time forward he made an uninterrupted recovery. At the present time he has a small tube in, which has really been kept in longer than was positively necessary, in order that I might be able to demonstrate the rush of the air in and out of the lung by means of a whistle which I have provided for the purpose. You will see that he presents the phenomenon of a man being able to blow a whistle by means of a hole in the chest wall, either on inspiration or expiration; but he has no cough, and is quite well and hearty, and might return to his work at any moment.

Remarks.—I don't think that there could be any reasonable doubt that this was a case of gangrene of the lung. The dulness, the gas-pipe dulness at times, the cavernous respiratory note, the increased vocal fremitus when the vomica was empty, and the peculiar stink from the sputum

make a group of symptoms which point unmistakably to one conclusion. Neither have I the slightest doubt that the man would have died had we left him alone much longer, and that we should have been able to demonstrate it as a case of gangrene of the lung in the deadhouse had his chest not been opened.

The success we have met with in this case corresponds with that met with by others in similar cases in England, and on the Continent. We may, in fact, regard it as the only successful mode of treating gangrene of the lung. A few years back—before this operation was attempted—this disease was one of the most fatal one had to contend with. Now, provided the position of the cavity can be accurately localised, we may give a much more favorable prognosis.

The lung has been opened up for bronchiectic cavities, and for phthisical vomicae, but the success which has attended these operations has not been nearly so great as it has been when the lung was opened up for gangrene. The difference in the results is no doubt due to the fact that bronchiectic cavities and phthisical vomicae very rarely occur as single cavities. Another cause for this difference is that these cavities as a rule lie much deeper in the substance of the lung than a gangrenous one does. No doubt phthisical vomicae do sometimes lie directly against the thoracic wall without any lung substance worth speaking of between them and the operator, but this is not by any means the rule. Another great advantage which the operation for gangrene possesses over that for either hydatid or bronchiectic, and often over that for phthisical vomicae, lies in the fact that in gangrene firm adhesions between the costal and pulmonary pleurae are almost invariably present, so that we run less risk of setting up pleurisy from the escape of the stinking discharge into the pleural cavity. Everyone of us must recollect that in making a *post mortem* upon a patient who has died of gangrene of the lung, it is extremely difficult to draw the lung from the pleural cavity without tearing the lung tissue, in consequence of the strong pleural adhesions. I do not recollect that I have ever been able to get a gangrenous lung out of the chest without tearing the tissue. But the question naturally arises as to when these adhesions occur, when are they likely to be of such a character as to be thoroughly protective. This is a very difficult question to answer, but I can see but little harm in our waiting as long as can be done with safety, in order that they may be thoroughly established. I think our patient runs much less risk if we allow the gangrene to go on for a week or two, more or

less, according to the severity of the case we have to deal with, so that the costal and pulmonary pleurae may become one inseparable membrane, than we do if we open the lung immediately we have satisfied ourselves that we have a collection of pus in that organ, for nothing can be much more certainly fatal to our patient than to set up septic pleurisy. Added to this, I think we must regard it as almost impossible so to secure the costal and pulmonary pleurae together by stitching that they shall not become separated by the effort of respiration.

There is a further advantage, in my opinion, in waiting as long as we safely can in these cases of gangrene, and that is that the lung tissue between the cavity and the operator becomes attenuated, and there is less risk of hæmorrhage and septic absorption. Added to this the operation becomes a much easier one.

## TWO CASES OF ATAXIC PARAPLEGIA.

By THOS. BAIN WHITTON, M.D., Q.U.I. &c.

REEFTON, NELSON, NEW ZEALAND.

Ataxic paraplegia, or combined lateral and posterior sclerosis of the spinal cord, as defined by Dr. Gowers, is one of that group of spinal sclerosis, whose characteristic feature is a degeneration of the nerve cells and fibres, with an overgrowth of connective tissue.

Included in this group are:—

1. Locomotor ataxy—the diagnostic symptoms are—loss of the patellar reflexes; loss of the iris reflex; no foot clonus; incoördination of movement; lightning pains; and gastric and other crises.

2. Hereditary Ataxy—Presents no knee jerk; nystagmus and some defect of articulation is present; is found in early life, and in several members of the same family.

3. Primary Spastic Paraplegia—in which there is extreme weakness of the muscles of the legs; an increased knee jerk and a spasm of the muscles, causing both legs to become quite rigid.

4. Ataxic Paraplegia—An increased knee jerk is present; an ankle and rectus clonus obtainable; no lightning pains; iris reflex normal; incoördination of movement during the early period of the disease, and spastic palsy latter on.

The following, is an outline of Dr. Gowers' description of the disease. "The clinical course, is one of a very gradual kind, and consists in the concurrent development of the two symptoms, weakness and unsteadiness, mostly developed in the lower extremities. At first sight, the patient looks as if he had locomotor ataxy, but an

examination of the knee jerk shows it to be greatly increased, and what is more a foot clonus may be obtained, and even a clonus of the rectus femoris muscle. The "lightning pains," which are so marked a feature in locomotor ataxy are absent in ataxic paraplegia. The iris reflex is present, as well as the plantar reflex, which is generally excessive. As the disease increases the muscular power becomes more and more impaired, usually without much increase in the incoördination, which sinks into the background as the paralysis increases, and the patient has to have recourse to supports. The increased knee jerk continues with stiffness and rigidity of the muscles, the feet drag as the patient walks, shake from clonus when he stops, and the legs are hauled forward with visible effort at each step.

Case 1.—Denis D.—, aged 65; a labourer, but who had been a soldier for a number of years, was an inmate of Reefton hospital, from March 1887 to May 1888, when he died.

Previous History.—He was a thin, spare man; his height is 5ft. 4in.; and his weight is 120lbs. His father was long lived and healthy; he had four brothers, also strong and healthy; and there are no traces of any hereditary diseases. He was a soldier for 13 years, having been stationed at Aden on the Red sea for 2½ years, and also being through the Crimean and Maori wars, as well as the Indian Mutiny. Having left the army, he spent six years as a farm labourer in the North Island; and shortly before he came to reside at Reefton, about five years ago, he began to feel a weakness in his legs and a difficulty in walking especially when raising his feet, but he never had any pains in the limbs or body. This feebleness gradually increased, until he was unable to do any work, except to cut firewood and cook for himself, compelling him at last to seek relief in the hospital. He never had any serious fall or injury, and through all his fighting career he had but one slight wound—a bayonet thrust in the abdomen. He never had dysentery, but whilst residing at Aden, he had several attacks of ague; it never returned during his residence in New Zealand.

Condition on Admission.—He was brought to the hospital suffering from an attack of pulmonary congestion of the left lung, accompanied with emphysema of old standing. After ten days, when the congestion had vanished and he was able to move about the ward, the paraplegia ataxy were noticed. It may be noted that, Terebene in Mx.—Mxxv. doses, combined with Spts. Chloroform and Mucilage; as well as smoking Can. Indica cigarettes, gave him the most relief from the emphysematous cough and dyspnoea.

On testing the reflexes, it was found that the patellar was increased in both knees, a very slight tap on the tendon being sufficient to produce it; no ankle clonus could be found now, though it was present later on. The plantar reflex is greatly increased whilst the iris reflex is normal. When he commences to walk, the incoördination is perceptible; after having got upon his feet he sets off with a swaying motion of the body; the legs are flung out in a circular fashion, and the feet are fully placed upon the ground, when their dorsal tendons are thrown into relief, reminding one of the movements of a hen's claw. The muscular spasm is most intense at the moment of placing the feet down. He is unsteady whilst standing with the eyes closed and the feet together; the left leg is the weaker one, and he says that it has always felt so. When once fairly started he can walk slowly for some distance; but on rising from a sitting posture, or on commencing to walk, he says that he always feels a difficulty as if the muscles were hard and tense but it passes away in a few moments. It is very difficult for him to ascend steps, of which there are three, leading from his ward into the garden. He has to assist himself by holding on to the wall, in ascending these steps. This arises from palsy of the flexor muscles. He never had any "lightning pains," but on several occasions he lay in bed for a few days, complaining of severe pain in the sacral region, and unable then, to raise himself in the bed; but this pain passed away on the application to the part of Spongio-piline, saturated with Lin. Bellad. Co. and Lin. Capsici. His arms are normal; he can carry coal or a log of wood for the fire, he having been appointed stoker to his ward. There is no loss of sensation on the legs or body, &c.; the urine is normal in colour, sp. gr. &c., no retention, nor cystitis.

Having recovered from the pulmonary congestion, he was able to walk about the ward and garden; and in six months time, slowly and with the aid of a stick, he was able to walk as far as his hut, three miles distant from the hospital. The treatment adopted, consisted in the daily injection of Liq. Strychnine Mx., selecting each extremity in rotation: no swelling or abscess was ever produced. After a month's treatment, there was an intermission for a week, when it was again renewed. He did not increase the spasm at this stage. Maltine was also given in two dram doses daily, which, with an allowance of whisky, caused him so to increase in weight, that instead of weighing 120lbs, his weight in six months time was 142lbs. He took the following during the same period B. Syrup Ferri Bromid. ʒiii., Tinct. Lupuli ʒs, Tinct. Cinch. Co ʒi,

Inf. Calumb. ad ʒvi., cap ʒii. t-i-d. His appetite kept very good all through, and he was given the full diet scale; so well, in fact, did he become that he would not remain any longer, but went to live by himself in his hut. Of course the improvement was in his general health, and not as regards the disease, as the following notes will testify:—

"Sept. 1, 1887.—The legs are very variable as regards strength, being very well on some days, and on other occasions they are feeling heavy and powerless; no ankle clonus is obtainable. Both patellar reflexes are greatly increased, for the legs can be jerked about four inches forwards, by placing a mark in front of the big toe as it rests on the floor, and tapping the tendon. The incoördination and spasm are the chief trouble. He complains bitterly on ascending the steps, or on walking up an incline; his appetite, sleep and bowels keep normal; the cough being the only worry, and when it becomes very distressing, he returns to his Terebene mixture."

He was re-admitted on Nov. 11, in a far worse state than before; during these two months of hermit life he lost 32lbs.; he is unable to stand alone, being scarcely able to walk about the ward, and so prostrated after the least exertion, that he has to rest. There is now very little incoördination, paralysis of the muscles being the prominent feature. The ankle clonus was obtained for the first time November 27, and was most distinct in the left foot, for by simply pressing the big toe and foot forwards on the leg, it produced a number of vibrations, without even tapping the tendo Achillis. Spasms of muscles of the legs have become very severe, so as to prevent sleep, and the muscular tissue is rapidly wasting. He is fed upon a diet of beef tea, egg, whisky, &c., and is now unable to leave the ward. The injection of Liq. Strychnine was resumed, but it was discontinued in a few days, as it made him worse by increasing the muscular spasm. He resumed the mixt. Ferri Brom. but in time became so prostrate, that he was given only Terebene mixt. with the addition of Spts. Nitrite Amyl.

April 1888.—He is excessively emaciated, a gradual decay of all the muscles in about an equal ratio; the skin is unbroken as yet, over the Sacrum; he has still command over the muscles of the arms, as he can light and smoke his pipe, but he is unable to sit up in bed now. He takes no food, has no desire for it, except milk and eggs, and his whisky; in fact, he is a "skeleton living on whisky." The pulse is 96 per minute, slow, weak, and very compressible. The urine is passed naturally; he never wets the bed, and the urine has not been ammoniacal. He

has finally, April 28, become semi-comatose, with the increased knee jerk still present, and the foot clonus always obtainable, and on May 1, he passed away quietly whilst smoking his pipe.

The dorsal and lumbar portions of the spinal cord, were removed and examined; there was no congestion visible, nor any adhesions; the sero-spinal fluid was present; the cord appeared contracted and narrowed in some parts, with the pia mater adherent. I made several microscopic sections, after hardening the cord, but not being well up in this work, I could only distinguish that the posterior columns presented a dark grey appearance, especially in a mid-lumbar section, and that a dorsal section showed the lateral column dense from the increase of connective tissue.

#### CASE II.

Mrs. H. H., aged 55, married, has had several children, has never had any injury, serious illness, or shock to the system. Until six or seven years ago, she was in robust health—an active, busy woman—when she perceived that the legs were not so strong as previously, that she felt tired far sooner, and that her mode of walking was not what it had been. These changes occurred gradually, so that two or three years elapsed before the incoordination was self-evident. She was greatly addicted to alcoholism, in fact, for a long time her case was regarded as one of alcoholic paralysis. She never complained of pains or any loss of feeling in the legs. The upper extremities in this case became weak and powerless about a year before her death; and as by this time the paralysis of the muscles prevented her from moving from her chair without assistance, she had to be attended to like a child. She now (March, 1887) takes little food. The urine is normal, and freely passed. She still indulges in alcohol. On examination I found that the knee jerk was greatly exaggerated. A foot clonus is easily obtained, as well as a clonus on the forearm, on tapping the biceps tendon; the iris reflex is normal. She feels inclined to reel over if the eyes are closed. The incoordination in the hands and forearms is such that she fumbles on attempting to button her dress, and to hold a cup or any article steady is impossible. Her speech is thick. In this state, but with a downward tendency, she continued until Nov. 29, when it was found that she was unable to move her legs or hands; that she could not swallow any fluids; that she could not speak, but on being spoken to her lips trembled, the tongue being paralysed. The excessive knee jerk was still found; the foot clonus was induced by simply holding the heel in the hand; and the arm clonus was so excessive as to cause a steady vibration of both forearms. She groans if the

cervical region of the spine is pressed or the head lifted; she passes urine involuntarily.

Dec. 1.—Temperature, 99°; pulse, 92. When spoken to she moans in reply; clonus of forearms, with a tetanoid contraction of the fingers.

Dec. 2.—Dying. She lies in a comatose state, with a "Chyne-Stokes" respiration; inability to swallow; the spasm of fingers and arm clonus have disappeared; the legs are rigid, and are drawn up, but they still jerk on tapping the patellar tendon: died at 1 o'clock p.m. No *post mortem* was obtainable.

This case is distinguished from multiple neuritis (alcoholic paralysis) by its chronic course, extending over several years; by the absence of a wrist and a foot drop; the absence of pains, and of hyperæsthesia of the skin; by the knee jerk not being lost; and the presence of the foot and arm clonus. The immediate cause of death was acute bulbar paralysis, whether from hæmorrhage into the medulla and pons or from the gradual ascent of the posterior and lateral sclerosis so as to involve the medulla, I am unable to say. No mention has been made as to treatment in this case; none was attempted; euthanasia was hoped for.

#### ON THE PATHOLOGY AND CURE OF SNAKE-BITE.

By A. MUELLER, M.D., OF YACKANDANDAH, VICTORIA.

#### IV.

THE diagnosis of snake-poisoning is not in every case as easy as it may appear to the uninitiated. No doubt, of course, can remain where the snake has been seen to strike, or even to bite and hang on to the bitten limb, and where the symptoms are fully developed. But frequently the snake is not seen at all, and yet has imparted its venom to the person, who, seeing a snake in close proximity, may merely imagine to have been bitten, and the terror so many people have of snakes may produce symptoms closely resembling those of snake-poisoning. Terror, we know, may cause instantaneous death, and in all probability does this by a complete paralysis of the motor nerve centres. As snake-poison likewise depresses the function of these centres, the close resemblance between two persons, one suffering from real the other one from merely imaginary snake-bite, is easily explained. The only distinguishing feature is the coma, but even

this is sometimes absent in real cases, and the enormous quantities of alcohol which are generally poured alike into real and supposed victims of snake-bite, may produce it in the latter in the form of complete anaesthesia, or acute alcoholism.

Another fruitful source of error that has cost many human lives, is the notion entertained even by the cognoscendi, that poisonous snakes under all circumstances leave only two punctures, and that in any alleged case of snake-bite showing more than two punctures we may safely infer and rest content that it was not inflicted by a poisonous snake. Though asserted by all authorities on the subject and taught in our schools, this is a fallacy likely to be fraught with most serious consequences, if implicitly accepted and acted on. My own close and careful observations have taught me, that whether a poisonous snake leaves one, two, or more punctures, depends on the state and position of the animal when inflicting the bite as well as on the part of the body on which it is inflicted. If this part presents for immediate attack a surface too large and flat to be seized by both jaws, the snake will nevertheless draw the jaws, which are both movable, as far as under as possible, but unable to bite in the literal sense will, by a quick downward jerk of the head, strike at its intended victim with the poison fangs, and if successful in the attempt leave the orthodox two punctures. But if to the same snake, more especially when at bay in a confined space and irritated or wounded, perchance a hand is presented for attack, it will not strike at it with the poison fangs, but to instil the fatal venom more effectually it will seize a finger or any part it can grasp between the jaws and bite it with the ferocity of a bull dog, often requiring to be shaken or even pulled off with some violence. In such cases there are generally four punctures, two corresponding to the poison fangs, and two to the fangs of the lower jaw. But I have seen a fatal case in which only one poison fang had been used, and the corresponding tooth of the lower jaw, there being but one puncture on the dorsal and one on the palmar surface of a bitten finger. In another fatal case the snake had likewise bitten with one side only, but seizing a finger at greater length it had inserted the poison fang of that side on the back and outer side of the right index finger near the second joint, leaving a large bluish puncture, and slightly more to the inside of it right up to the nail a number of small punctures, evidently corresponding with the outer row of palatal teeth, whilst opposite the larger puncture the palmar surface of the finger presented one made by the tooth of the lower jaw of that side. Both these cases occurred in hare-

hunting, that favourite sport and pastime of young Australians. The snakes happened to be in hollow logs, into which hares had been chased, and the unsuspecting youths after cutting holes where the hares were thought to be had thrust in their right hands to pull them out, but after being bitten had not realised their condition until the poison had been absorbed, because the two-puncture-doctrine taught them in school, had thrown them off their guard, and prevented them from taking immediate measures to arrest and eliminate the poison. A bootlace tied immediately and tightly round the bitten finger above the second joint, would, in all probability, have saved their young lives. These are facts, for the correctness of which I vouch, and that can be verified by experiment. Implicit belief in the two-puncture-doctrine and its correctness under all circumstances, may cause even medical men, as it once caused me, to commit a serious "act of omission," hence I have dwelt on this point with emphasis and at some length.

With strychnine as the antidote, the diagnostic difficulties in snake-bite are greatly lessened. Should a careful analysis of the history of a case not enable us to judge conclusively, whether the symptoms emanate from fear or real poisoning, a small injection of *Liq. Strychniæ* will, in case of mere fear, be quite sufficient to brace up the nervous system and restore confidence of recovery, with which all alarming symptoms quickly disappear. Their continuance would indicate the presence of snake poison, and call for larger doses of the antidote. But if in one of these cases of false alarm alcohol has been administered in excess, as it is usually done, and we find the person perfectly unconscious and collapsed, doubts may arise as to the cause of this condition, which strychnine would not solve, as it is quite inoperative in alcoholic coma. Besides ascertaining the exact quantity of alcohol taken and whether the person is used to it or not, we should have to be guided in our diagnosis by the state of the pupil and conjunctiva, by the pulse and respiration. In alcoholic coma the pupil is as often contracted as dilated, and becomes permanently dilated in extreme cases only, but even then shows a sluggish reaction to light, the conjunctiva is invariably injected, the pulse slow and small, and the respiration slow, intermittent, and often stertorous.

In snake-bite coma, the pupil is always greatly dilated and insensible to light. The conjunctiva pale and not injected, the pulse quick and small, and the respiration quick and shallow.

It is fortunately of rare occurrence that the abuse of alcohol in these cases is carried to this extreme state of collapse. Generally stimulants have been taken well diluted with water, and



we find our patients merely dead drunk; we are able to rouse them momentarily into a state of semi-consciousness, and may then safely consign them to "sleeping it out."

With regard to the use of alcohol in snake-bite I have no hesitation to affirm that with snake-poison in the system its physiological action is completely neutralised, and that it has no more effect than water; that, consequently, it is perfectly useless as a remedy, and should be entirely dispensed with. No matter how large the quantity taken, its stimulating action does not become manifest by as much as a flush of the cheeks, until the snake-poison has been effectually counteracted by strychnine. The writer has repeatedly made this observation, and it has been fully confirmed by Dr. Thwaites, of Tallangatta. In the very interesting and almost unique case this gentleman laid before the Medical Congress a girl of 13 years, bitten by a tiger-snake, had, immediately after the bite, and until she became comatose taken nearly a bottle of brandy. When five hours afterwards she was carried into his surgery the coma was complete, pulse at wrist and perceptible respiration had quite ceased, and only a faint fluttering of the heart indicated that life was not entirely extinct. The girl was, in fact, at the very point of death, although ligature and excision almost immediately after the bite must have eliminated much of the poison. One single injection of seventeen minims of Liq. Strychniæ restored her to consciousness, and in less than a quarter of an hour she sat up in bed, recognising her friends. But, strange to relate, the bottle of brandy she had taken five hours ago only then commenced to take effect. This effect increased rapidly, till she became outrageously drunk, committing herself in a manner which in her normal condition, quiet, modest and reserved, she would have been horrified at. Similar observations will no doubt be made by others using the antidote after alcohol has been taken in the usual heavy doses, and it may be laid down as a rule that wherever we see unmistakable effects of alcohol, snake-poison is either absent altogether or has been effectually neutralised. To assure myself of the latter fact, I now invariably give a moderate quantity of stimulants (after producing slight strychnia symptoms), until I see my patients getting "jolly," and implicitly trust to this test. When, unguided by any experience, I injected strychnine for the first time in a very serious case of snake-bite, when I had succeeded in rousing my patient from a death-like coma, and actually got him to sit down to tea with me, I endeavoured in vain for several hours by ordering copious draughts of brandy and water to remove a certain depression under which he was still labouring, and I was

amazed to see a lad of 15 years, who had never tasted spirits, take glass after glass without any perceptible effect. This was an enigma to me at the time, which only subsequent experience taught me to solve. I had not pushed the strychnia treatment far enough, though he had received one-third of a grain of the drug, and the snake-poison, still lurking in his system, overpowered him during the night. If, instead of trusting to the useless alcohol, I had given him another dose of the antidote, I should most assuredly have saved him. It was my first, but it will also be my last fatal case of snake-bite, treated with strychnine.

Writing for medical men it is not necessary for me to dwell on the physiological action of the antidote, beyond pointing out that this action is exactly the reverse of that of snake-poison. Whilst the latter, as I have shown conclusively, turns off the motor batteries and reduces the volume and force of motor nerve-currents throughout the system, the strychnine turns them on with more than normal vigour, and increases the volume and force of these currents. It stimulates the motor nerve-cells in poisonous doses to discharge their force in intermittent but ever increasing volumes, until every muscular fibre is in tetanic contraction.

It is seldom that, confronted with our great antagonist—disease, we occupy a more commanding position than when, armed with hypodermic syringe and Liq. Strychniæ, we stand at the bedside of a person, brought by snake-bite from vigorous health to the very verge of the grave within a few hours, a position of utter helplessness formerly, but now one of absolute supremacy over one of the most insidious enemies to human life. Strychnine in snake-bite acts with the unerring certainty and precision of a chemical test. Purely physiological in action, it neutralises the effects of the snake poison and, moreover, announces by unmistakable symptoms when it has accomplished its task, and would, if continued, become a poison itself. Previous to this announcement its poisonous action is completely neutralised by the snake poison, and the latter would therefore be equally as efficacious in strychnia poisoning as strychnia is in snake poisoning.

This reciprocity of action renders it self-evident that the dose of the antidote must be in proportion to the quantity of snake poison likely to have been absorbed, and of this the history of the case as well as the violence or comparative mildness of the symptoms will always enable us to form an estimate. If ligature and excision have been practised imperfectly or omitted altogether, and if the snake, savage and poisonous in a high degree, has, by biting, remained in contact longer

than it would in merely striking with the poison fangs, a comparatively large quantity of the antidote will no doubt be required before the strychnine symptoms are evolved and the patient's safety is assured. Thus in the first case recorded by Dr. Thwaites, a labourer, W. B., bitten on the hand by a tiger snake, had both ligature and excision very imperfectly applied and was not treated until five and a half hours after the bite, when absorption had done its work, and coma and collapse were complete. One-sixth of a grain roused him and he was able to make his wants known; but, feeling his way very cautiously, Dr. Thwaites did not repeat the injection, and in an hour collapse and coma again set in, to be once more removed by an injection of the same strength. W. B. then remained conscious for nearly three hours, yet without any strychnia symptoms appearing. At the end of that time the snake poison again overpowered him and his death appeared imminent, when Dr. Thwaites, hastily summoned, injected 20 minims, or one-fifth of a grain, of strychnia. Slight muscular spasms now set in and recovery was complete, but not until 54 minims of Liq. Strychniæ, or more than half a grain of the drug had been injected.

In a case treated by Dr. Mahoney whilst *locum tenens* for Dr. Kennedy, of Albury, and kindly communicated to me by both gentlemen, only one-fifteenth of a grain of strychnine administered in four injections, was required to effect a cure. A girl of 19 years had been bitten by a brown snake at the wrist over the knuckle of the ulna. A ligature had been applied at once and the girl driven to Albury, where she arrived an hour after the bite, suffering from paresis of the lower extremities and great tendency to sleep. She could barely drag the legs along and staggered when attempting to walk. No visible change took place after the first three injections, equal to one-twentieth of a grain, but the fourth sufficed to remove every symptom and enabled the girl to return home perfectly restored to her normal condition, in which she continued uninterruptedly, reminded only by the skin excised from her wrist, of the ordeal she had gone through. Only a small quantity of poison had evidently been absorbed, and a proportionately small quantity of the antidote was required in this case. Its chief interest centres in this; also in its illustrating very markedly the initial stage of snake poisoning, which in more severe cases is of so short a duration as almost to escape observation. The two disturbing elements, fear and alcohol, were likewise excluded. The girl was perfectly cool and collected, and, strange to relate, no stimulants had been administered by the relatives.

## PARAPLEGIA—THE RESULT OF HYDATIDS WITHIN THE MEMBRANES OF THE SPINAL CORD.

REPORTED BY DR. A. W. MARWOOD, RESIDENT SURGEON, GEELONG HOSPITAL, VICTORIA.

F.H., æt. 31, was admitted into the Geelong Hospital in September, 1887, with well-marked paralysis of the lower extremities and loss of control over bladder and rectum. Treatment was unsuccessful, and the patient gradually sank and died on January, 1889.

With a view to ascertain the cause of the paralysis, I made a *post-mortem* examination, assisted by Dr. Baird.

*Autopsy.*—An incision was made down to the spine. The transverse processes of the 4th and 5th lumbar vertebrae were found to be completely carious, breaking down on the slightest pressure. Examining with my finger, several small cysts escaped. Continuing the examination, a large cavity, filled with cysts of various sizes, was found communicating with the abdomen. Exposing the spinal canal, numerous cysts were seen; and opposite the 10th and 11th dorsal vertebrae, and within the meninges of the spinal cord, were several fluctuating tumours, afterwards proved to be hydatid cysts. On opening the abdomen from the front, and exposing the spinal column, two round tumours, about the size of oranges, were seen lying on each side of the lumbar vertebrae—the one on the left side communicating with the spinal canal by means of an old suppurating cyst. These tumours were composed of a large number of small cysts. No cysts were found in the other organs.

The cord and membranes were carefully removed and sent to Dr. Maudsley for more minute examination, to whom I am indebted for the following notes:—

*Notes by Dr. Maudsley.*—Occupying the theca vertebralis below the termination of the spinal cord, between the pia mater and dura mater, is a hydatid cyst which before disturbance must have been of the size of a hen's egg. The cyst wall is of considerable thickness, and is adherent to the dura mater, but can easily be peeled off. Within this mother cyst are two daughter cysts, each about the size of a pigeon's egg; each daughter cyst contains a thin-walled secondary cyst, in all five cysts. The spinal cord itself shows no signs of pressure, but the nerves of the cauda equina, running between the dura mater and the mother cyst, are markedly flattened and thinner than natural, are considerably atrophied from the pressure they have been subjected to.

Unfortunately the cord has not hardened well, so that it is difficult to demonstrate the position of any ascending degeneration that may be present. It is evident the hydatid cyst has developed within the membranes, but whether in the arachnoid, or between the arachnoid and pia mater, it is impossible to say.

### PECULIAR CASE IN WHICH GLYCOSURIA COMPLICATED A SEVERE BURN.

By JAMES McNISH, M.B., M.Ch., GLASG.;  
L.R.C.P. AND L.R.C.S., EDIN., OF BULAH-  
DELAH, NEW SOUTH WALES.

THE following report, condensed from notes taken during the course of the case, was deemed worthy of publication on account of the somewhat unusual symptoms observed.

X, aged 56, a blacksmith by trade, a total abstainer, and whose previous and family histories are good, sent for me on Sept. 4 of last year, on account of having been severely burned on the previous evening through the ignition of a bottle of kerosene. On examination, burns of the second and third degrees were found afflicting the whole of the right hand and forearm up to the elbow joint. The left hand, forearm, and half the upper arm were severely burned, and at intervals over the surface were large yellowish-white eschars. Considerable tracts of skin had been removed from the wrists and lower parts of forearms, through the patient rolling in grass for purpose of extinguishing the flames. Large blisters were found on the left side of the abdomen, and on the anterior surface of the left thigh. Shock was inconsiderable; temperature, 98; pulse, 70. Considerable pain and thirst were complained of. The wounds were treated in the usual way, and dressed with carron oil, while absolute rest and a nourishing diet were ordered.

Sept. 9.—Temperature, normal; pulse, 76; appetite good; very slight thirst; bowels regular. The eschars had separated, and the wounds presented a healthy appearance, commencing cicatrization being visible at the edges. Little or no pain was experienced except when the dressings were being removed. Dry iodoform was now dusted over the wounds, and over this oiled lint was applied. The dressings were ordered to be changed daily.

Sept. 10.—Patient expresses himself as feeling well; temperature, 99; pulse, 74, good; appetite and digestion good; specific gravity of urine, 1028; no albumen or sugar; slight

deposit of pink urates; wounds look exceedingly well; very slight inoffensive discharge, and cicatrization progressing rapidly.

Sept. 16.—To-day, although the wounds look well and healing has advanced since last visit, a marked diminution in the strength is noticeable, with considerable emaciation. Temperature, 102·8; pulse, 100, soft and feeble. Intense thirst and frequent desire to micturate were complained of, with an increase in the quantity of urine, 2½ quarts having been passed during preceding 24 hours. On examination the urine was found to have sp. gr. 1082, and gave distinct saccharine reaction with Trommer and Fehling's tests. An anti-diabetic diet was ordered, and 1gr. of codeia three times a day.

Sept. 20.—Wounds still progressing favourably. Temperature, 108; pulse, 120; patient greatly prostrated and slightly delirious, but would answer questions sensibly when spoken to firmly. Sp. gr. of urine, 1048; strong saccharine reaction; about four quarts passed in 24 hours.

The symptoms continued much the same as on last date until Sept. 25, when the thermometer registered 104·2. The wounds looked well, with the exception that a small abscess formed in the subcutaneous cellular tissue on the anterior surface of the injured thigh. This was poulticed, and discharged the following day, leaving a healthy-looking sore.

Oct. 3.—Wounds almost wholly healed; temperature, 102; pulse 126, very feeble and intermittent; low muttering delirium, with every appearance of approaching coma. The urine on examination gave almost the same results as on last visit. Emaciation and prostration extreme; patient would eat or drink anything put to his mouth, but had no expressed desire for either food or drink.

Oct. 5.—A marked change for the better took place. Temperature fell to 100. Reason returned, and thirst diminished, as did also the amount of urine; sp. gr. 1022, with only traces of sugar.

Oct. 8.—Temperature, 98·8; pulse, 86; urine, sp. gr. 1023. Patient expressed himself as feeling stronger, with good appetite and no abnormal thirst.

Continued improvement took place until Oct. 11, when the patient was able to walk out. His urine showed no trace of sugar with the ordinary tests, and he was pronounced convalescent. A perfect recovery took place, and he is now engaged daily at his usual avocation.

Remarks.—The noteworthy points in this case are:—(1) The marked rapidity with which the urine became to such a high degree saccharine,

glycosuria being generally looked upon as an insidious condition. (2) The sudden and rapid diminution in the amount of sugar in the urine after Oct. 4, on which date improvement commenced. (3) The very satisfactory and continued progress observed in the healing of the wounds, notwithstanding the pyrexia, the highly saccharine condition of the urine, and the great prostration of the patient; these circumstances being generally looked upon as retarding healing processes and tending to degeneration of tissue.

## PROCEEDINGS OF SOCIETIES.

### SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting held at the Adelaide Hospital, at 8-30 p.m., on Thursday, March 28.

Present:—The President (Dr. Stirling), Drs. Lendon, Corbin, Clindening, Watson, MacIntosh, Veroo, Mitchell, Gault, Ewbank, Jay, Giles, Symons, A. A. Hamilton, Swift, Cookson, Stewart, Horneck, Aitken, Gardner, Swift, and the Hon. Secretary (Dr. Poulton).

Minutes read and confirmed.

A letter was read from the Medical Benevolent Fund Association, saying that the Association had no funds which they could disburse for the assistance of a distressed practitioner.

Dr. GARDNER exhibited a man who had undergone excision of the humerus, scapula and clavicle for osteitis; also an adult female, on whom, two years ago, he had operated for movable kidney, and who was now quite recovered, the kidney being fixed.

Dr. A. A. HAMILTON showed a boy, set. 12, the subject of multiple exostoses, probably ossified enchondromata.

Dr. SYMONS showed a man with one enlarged lachrymal gland.

Dr. SWIFT exhibited the uterus, with its appendages, and a foetus of about three months' development removed, *post mortem*, from a young woman who had died from ruptured tubal pregnancy.

Dr. VEROO exhibited macerated and prepared bones of a skull from a case of abscess, after middle ear mischief.

The resemblance of the macerated bones to those of spinal caries was remarked, as also the liability to a diagnosis of angular curvature from caries. The existence, however, of concomitant malignant growths elsewhere would establish the true nature of the disease in most cases.

Dr. Veroo also exhibited the macerated specimen from the case of cerebral abscess secondary to middle ear disease read by Dr. Veroo and Dr. Stirling at the Intercolonial Medical Congress in Melbourne. In this the skull was trephined and the pus evacuated. The description of the specimen will be published in the transactions of the Congress.

Dr. Veroo showed a macerated specimen of three lumbar vertebrae, taken from a Chinaman who died in the Adelaide Hospital. He came in with retention of urine and almost complete paraplegia, and died within two or three days with abundant hæmaturia. At the *post mortem* examination there was found a small soft round growth from the right front of the spinal column,

the size of a hen's egg; also a large growth in each iliac fossa beneath the iliacus as large as an emu's egg. These were both very soft so that the finger could be thrust through the soft tumour, and softened iliac bone into the muscular substance of the thigh.

The specimen exhibited showed that the malignant disease had involved the body of one lumbar vertebra, and had so softened its osseous tissue that it had broken down under the weight of the spinal column above, especially at the front so as to be here only about one-third of the depth of the body at the back. In this way an angular curvature was produced. There was a fine rim of new growth along the contiguous front margins of the vertebral bodies above and below. The neural arches were not involved. There was, however, some spicular bony outgrowth from the involved vertebral body at the large foramen on its posterior surface into the spinal canal.

Doubtless this backward extension of the malignant growth by pressure on the cauda equina, together with the slight angular curvature, had caused the paraplegia.

Mr. Charles Gower Lermite, M.R.C.S., L.S.A., of Salisbury, was duly elected a member of the B. M. Association and its S. A. Branch.

Dr. GARDNER, pursuant to notice of motion, moved: "That the Council of this Branch take into immediate consideration the best manner and methods of publishing its proceedings, with a view of altering the present arrangement for publication by the AUSTRALASIAN MEDICAL GAZETTE." He said:—Mr. President and gentlemen,—I have felt for a long time that in departing from our old plan of publishing our transactions in the Colony, we have made a great mistake. I have always deeply regretted that movement, and I certainly consider it was a retrograde step to send our transactions to Sydney for publication. I consider it places us in the light of a second-class Society. Under the present plan I consider we have retrogressed, and, I think, the best thing we can do will be to retrace our steps, and adopt the plan which previously was in force, and print our transactions here. On looking back at our previous transactions I have derived great pleasure from reading them, and at glancing over the work of men who have occupied positions of honour in times past. *As the reports are printed at present, it is impossible to do this, and anyone looking at the work now would be inclined to say: "Although the Society is numerically stronger now than it was in the past, still the work being done is not nearly so good."* I consider this is due to many reasons. I think too much work is attempted in one evening. Notices are sent out, and members come here prepared with *papers night after night*. There is no time for them to be read, and the result is they go away disgusted, and send their papers to other journals for publication. I don't think we should attempt so much. If a man does not put in an appearance with his paper, the time might be very profitably utilized by some discussion on some interesting subject. Then I think we have too much surgery in this society. Looking back on some of the reports I see nothing but surgery.

The PRESIDENT.—I think Dr. Gardner is scarcely keeping within the terms of his motion.

Dr. GARDNER.—I think I am, Mr. President, and was about to say that I think this society might be very much improved, and I believe that if our proceedings were published in the same way as they were in the past, that it would materially conduce to this end. If we had our own journal, I feel sure that general practitioners would be encouraged to send in reports of cases, and these, with the reports of our transactions, would materially assist in building up a journal fitting to take

place with any of the journals of Australia. (Hear, hear.) I certainly think the journal we send our transactions to is one of the worst I have read. It is very unreliable, and if you follow it you will find yourself landed in some inextricable hole. (*sic!*)

DR. CLINDENING.—I have much pleasure in seconding this motion, and in doing so may I be permitted to say, as one of the founders of this Branch of the British Medical Association, that I was exceedingly astonished when I found that the transactions of the Association were handed over to another journal for publication, thus abolishing our own and doing away with what I consider was an extremely good and very well got-up journal. I must certainly say I have not the same pleasure in reading our transactions in the Sydney journal as when they appeared in our own.

The SECRETARY (Dr. Poulton) read a letter from the publisher, and the following letter from Dr. Bickle, of Mount Barker :—

Mt. Barker, March 25, 1889.

"The Secretary S. A. Branch B.M.A.

"Dear Sir,—I notice on the agenda a motion by Dr. Gardner *re* publishing the proceedings of the branch. To one living in the country the present plan seems in every way preferable to the one formerly in use, as it brings us into touch with the branches in the sister colonies of New South Wales and Queensland. If, therefore, Dr. Gardner wishes to return to the separate publication of our proceedings, I should like to give my vote against such a plan, unless the idea be to publish the year's transactions in a separate volume, the monthly reports being published as usual in the A. M. G.

"This motion of Dr. Gardner gives me the opportunity of referring to the suggestion independently broached by Dr. Verco and myself at the South Australian Congress. I allude to the formation of a medical paper that shall fitly represent the profession in Australia, for whatever may be the individual political opinions with regard to a Federal Australia, there can be no doubt that the questions relating to the health of the various communities will recognise no artificial boundaries.

"At present we have two journals, neither of which fitly represents the profession as a whole. Of these the A. M. G., especially since the reports of the New South Wales, Queensland and South Australian Branches have been published in it, has the greater claim on our support. The Victorian organ could be absorbed in this with small loss to our Victorian confrères to the gain both of themselves and ourselves, but even then the paper would require to be conducted on broader lines than at present. The late Congresses of Adelaide and Melbourne have shown the value of a Federal Medical Association, if I may so call it, and the time has now come, I think, when we may begin to consider the advisability of starting an organ of the whole profession in Australia. The matter will, of course, require great consideration and thought, and so that the matter may be yet going I beg to move (either as a rider to Dr. G.'s motion, or an amendment as the meeting may decide), that :—

"The Council be requested to communicate with the Councils of the other branches with the view of establishing an Australian Medical Journal which shall adequately represent the profession in the whole of Australia, and the adjoining colonies of New Zealand and Tasmania."

Yours, etc.,

L. BICKLE.

The PRESIDENT.—Perhaps it would be convenient, gentlemen, for the Secretary to state the cost of the journal, as it is and as it was.

The SECRETARY.—I cannot give the required figures, but as Dr. Corbin, the Treasurer, has prepared them, perhaps he will read them.

DR. CORBIN.—In 1883-4 we paid £29 to Frearsons; in 1884-5 the net cost to the association was £47; in 1885-6, £42; in 1886-7, £48; for the second half of 1887, £9 15s. During the first half of 1888 we first subscribed to *The Australasian Medical Gazette*, and for the last twelve months the cost has been £54 8s. 6d. The highest sum we paid to Frearson was £48, and £54 is the cost for the current year. The gross amount we had to pay was rather more in 1884-5. We paid £61, but when there was a very elaborate paper of Dr. Thomas's with tables, which cost £27, but Dr. Thomas paid half. During 1885-6 there was considerably more commercial activity in the place, and Frearsons got us advertisements amounting to £13 5s. on the covers. This sum was deducted from the total amount, £56, so the cost, therefore, was about £42.

DR. HAYWARD.—What was the number of membership then and now?

DR. CORBIN.—That is an important point, as the number of members makes a distinct difference since we pay per half year for each member. When Frearsons had the contract they printed a sufficient number to supply each member with a copy, besides retaining one for binding purposes. I think about one hundred were bound, and copies were sent to the principal Australian Journals, the *Lancet*, the *British Medical Journal*, etc.

The SECRETARY.—There are seventy-five members at present.

DR. CORBIN.—I don't think, Mr. President, we can argue much on the question of cost. Personally I think we made a mistake when we made this arrangement. I think it was due to Dr. Creed, the editor of the *Australasian Medical Gazette*, who talked over some of the members at the time of the Congress. I consider it is a great mistake to send our work away to another colony to be printed. In this way we make no show, and we have nothing to look back upon. It is very pleasant to be able to peruse our back volumes and compare the progress we have made, the interchange of ideas, &c. Whilst I should like to see a return to our old plan of publishing our proceedings, at the same time I trust that it will some day assist in the formation of a journal which will represent us in a more general way. I think it is probable that we shall find in the country a majority of members who prefer the present arrangement, and it is only right that they should have a voice in the matter. I don't consider that we as the central body should decide the matter in a manner that won't recommend itself to the majority of our members, and I would ask members to say if they do not think it would be wise to defer the matter, in order to allow country members an opportunity of expressing their opinions on the subject.

The PRESIDENT.—I don't think there will be any doubt as to the impropriety of passing such a motion without first consulting the country members. I think they should have an opportunity of seeing the views expressed by both sides.

DR. CORBIN.—There will only be two more meetings before the annual meeting. It will take a month, or perhaps longer, for a report of this meeting to reach country members. It might perhaps be arranged, as part of the annual meeting, to finally decide what shall be done in this matter. As country members are always provided with slips to record their votes for officers, they could also be provided with slips for this purpose. I don't like country members being able to say that we took a high hand in this matter.

The PRESIDENT.—Move an amendment then, that the matter be left for determination at the annual meeting.

Dr. CORBIN.—Very well then, I will move as an amendment:—"That the Council take the necessary steps to have the question of publishing our transactions determined at the next annual meeting."

Dr. JAY.—I will second that.

Dr. CORBIN.—Would it be possible to add to my amendment that only business be taken at the annual meeting, and not scientific work?

The PRESIDENT.—I think you had better make a separate motion of it.

The SECRETARY.—I have turned up the memoranda of the meetings at which the alterations were made. At the annual meeting held here on June 30th, 1887, a committee (Drs. Corbin, Gardner, Thomas, Poulton and Cleland) was appointed to consider the question of printing, and instructed to report to a future meeting. At the usual monthly meeting held in August the question was reported as being still in abeyance. On September 29 the President reported that two offers for publication of reports had been received, but the Committee deemed it best to refer them to the General Meeting for decision. After discussion it was resolved that the offer of Dr. Creed should be accepted—on the motion of Dr. Poulton, seconded by Dr. Stirling—but it having been pointed out that £2 2s., the amount of the present subscription, would not allow of the *Gazette* being supplied free; a Committee was appointed to enquire as to terms. The arrangement that has been made with the publisher is, that this branch of the British Medical Association pays to the proprietors of the *Gazette*—per annum for each member, a *quid pro quo* being that each member receives a copy of the *Australasian Medical Gazette*, the cost of which to other people is £1 per annum. That was one of the reasons why the *Gazette* was chosen in preference to the *Journal*, as the latter would make no difference in the terms of subscription. While I have always looked on our own publication with considerable approval, I was one of those who wished to see a change, and the mode of publication altered; my reasons being, first, that I think it would be much better that all the different societies in Australia, if possible, should have their proceedings published in a journal with a large circulation among members of the profession here and elsewhere. I think members will agree that it is not desirable that their papers should be published and circulated *only* among the members of the particular society to which they may happen to belong. That is the reason I assisted in carrying out this change. Another reason why I thought it would be a very good thing was, that I considered it would familiarize our members, and especially those arriving from the old country, with the views of members in the other colonies, and *vice versa*. That, Mr. President, was, and is my opinion. Though I think the form of publication adopted by the *Australasian Medical Gazette* might be improved, still I look upon it as a paper which carries out many of the objects which one may desire to see in such a paper, and with the support of our branch, and the Sydney and Brisbane branches, the paper is sure to go on improving. Though Dr. Gardner said he thought it was a retrograde step in getting our transactions printed in the *Gazette*, I think it would be a retrograde step to return to the old method of publication. In such a small community, however desirous we may be of producing a creditable paper, we can never hope to have it compared with the journals of the old country. Therefore I think we should do everything we can to assist in the formation of a thoroughly representative Australian journal. I am

upheld in that opinion by the letter from Dr. Bickle, in which he advocates the creation of a new journal altogether. I have not seen many of the country members, but several told me that they considered it advisable to continue the present mode of publication, rather than to return to the old method. I think a strong point in favor of publishing our transactions in one of these established journals is that they obtain a world-wide circulation. Dr. Corbin said that our publications were sent to the *Lancet* and other important papers, but so is the *Australasian Medical Gazette*. We have to consider the country members, who cannot attend the meetings of the Branch. If they take any interest in the proceedings at all they like to see them properly and promptly reported. Now when we published our proceedings here, they did not sometimes appear in time for the next monthly meeting, and sometimes even as long a time as three months intervened. I well recollect the difficulty we had in getting Frearson to produce them in time for the next meeting. On the other hand, as the *Gazette* is published regularly on the 15th of each month, all the members receive a copy before the following meeting. For instance, we have a discussion pending on diphtheria; the papers were printed a week ago, but I doubt if we could have possibly secured that under the old system. I grant the *Gazette* might be improved, and I think we may assist in improving it. I don't think we will do well in trying to start a publication of our own, for we will only get South Australian contributions, and our papers will not get such a wide circulation as they do under the present arrangement. As regards the question of cost, I don't think that will affect us much; but, as I before said, when we had our own publication we often had to wait as long as three months for it. Now we always get it on about the 17th of the month following the meeting, and this is a very important point. I support the motion strongly, because I think the Council should go into the matter very carefully, objection having been expressed to the present mode, and determine such measures as will enable the Association to find out the views of all the members on the subject. I think if the matter be left to the Council, they will endeavour to find out the opinions of country members in regard to this very important subject.

Dr. VESCO.—I think it will be a great deal better to combine both the motion and the amendment. Let the Council bring forward all the facts necessary at the next meeting. Let us then have some information as to the views of the Council themselves, and all the information that can be obtained as to the establishment of an intercolonial medical paper, the publication by ourselves of our own transactions, the publication in some other medical journal, and also particulars as to cost. Personally, I should prefer to have our proceedings published as we published them before, but at the same time I think there is a great deal of truth in Dr. Poulton's remarks, and we must consider not our personal desires alone, but those of the country members as well.

Dr. CORBIN.—But how are the country members to know our policy, if it is not to be disclosed till the annual meeting?

The SECRETARY.—This discussion will enable country members to see what is the opinion of city members, and may induce them to express their opinions by letter.

The PRESIDENT.—We can ask them to do that. I think, gentlemen, the matter must go through the Council, in the first place, for, after all, I do not know that we are absolutely driven to an alternative. It might be possible to come to some arrangement whereby

we could have an annual volume of our proceedings, and yet have our transactions published in the Australian medical press. I do not say I have formed any scheme as to how it could be carried out, yet it is done in England. I go greatly with Dr. Gardner. His main objection is, that he has no tangible volume to put his hand on to refer to our particular work. With regard to the method of publication adopted by the *Australasian Medical Gazette*, I do not think the *Gazette* quite deserves all that has been said about it. I believe the Editor has always supported the best interests of the medical profession, and has taken a firm stand on many questions on which we feel strongly, and I am quite sure he has supported the views we took. He always does his best, and I do not think there is any publication in the colonies you can put on the same pedestal. Whatever arrangement we make will depend, to a large extent, on the Secretary, or whoever we may appoint. Dr. Cleland was in a most favourable position for attending to the routine work, and we all know the ability and care he devoted to this particular work. One thing we miss in the Sydney journal is, that there is no record of our debates. We do not get that now, and we might not get it even if we returned to the old arrangement. As far as I am concerned my mind is quite free, but I think the matter should be carefully considered by the Council, who should bring up suggestions. A small body like the Council can better see what should be done, rather than a large body such as is now present debating the matter. I would support Dr. Gardner's motion.

DR. CORBIN.—With your permission, Mr. President, I will withdraw my amendment.

DR. JAY.—I am willing to agree to that.

The motion was then put and carried.

THE PRESIDENT.—I suppose it will be left to the Council to take the necessary steps for ascertaining the opinions of the members?

DR. VEROO.—I will move, then : "That the Council take the necessary steps for ascertaining the opinions of country members, and report to next meeting, and that the matter be finally decided at the annual meeting."

DR. GARDNER seconded.

THE SECRETARY.—You said, Mr. President, that there was not much record of the debates in *The Australasian Medical Gazette*. It might be gathered from that that the *Gazette* did not publish the proceedings as they were sent. As a matter of fact they publish everything I send, and I think they would publish the debates much more fully if they were sent. The question of reporting the debates rests largely with the members who speak. It is impossible for the Secretary to take down accurately voluminous notes, but if the gentlemen who speak would furnish me with a *precis* or full notes of their speeches, I should be pleased to send in full reports to the *Gazette*.

The motion was then put and carried.

DR. GARDNER.—I wish, Mr. President, to say a few words. I want to say that we simply wish to convey to the Council that some other arrangement should be made for the conduct of the business of the meetings. (Hear, hear.) We take—at any rate some of us take—the trouble to get patients here from long distances, and at our own expense, and it is hardly an inducement to repeat the experiment, if, perhaps, one member examines him, and he is then sent into the next room. I think one in every four meetings should be set aside for clinical work, and we could then bring forward important cases. I think, too, that every member bringing forward a patient should have notes of the reasons for introducing the case. We don't want to inspect say a number of animals with peculiar marks, but interesting cases.

THE PRESIDENT.—Are you moving anything Dr. Gardner?

DR. GARDNER.—Yes, Mr. President, I propose—"That this meeting adjourn till this day month." (Laughter.)

DR. HAYWARD.—I beg to second the motion. I cordially agree with what Dr. Gardner has said.

THE PRESIDENT.—Is this a sort of no-confidence motion? (No.)

DR. HAYWARD.—I am sure members would be glad if we could have a night set apart for clinical work as Dr. Gardner has just said, but at present I don't see how we can change the meetings without discussing it at the annual meeting. It will mean changing the articles of association.

THE PRESIDENT.—I hope this motion is not intended as a no-confidence motion. (No.) I admit there is need for improvement, and I am only sorry that when Dr. Gardner was in the chair that he did not introduce some such alteration. I agree there is room for improvement in regard to the postponement of matters, but it is impossible to avoid this altogether. For instance, this evening Dr. Gardner's motion might have been carried at once, and then that would have meant a short evening, and necessarily a considerable waste of time. It is impossible to avoid an occasional postponement. Perhaps the Committee have erred in having too much business in hand, but I hope nevertheless, those gentlemen whose papers are postponed won't think harshly of them. With regard to a general alteration of arrangements, I think that might be considered at a general meeting. The Committee could consider it beforehand, in order to see if they could not devise a more favourable course of arrangement. They could then suggest this to the general meeting.

The motion was then put and carried, and the proceedings terminated.

The Hon. Sec. will be happy to receive from members unable to attend meetings, any suggestions they have to offer as to the publication of the Branch's proceedings, and will lay their letters before the Council to assist them in the report moved for by Dr. Veroo.

[Whether the present arrangement made between the South Australian branch of the B.M.A. and the A.M.G. shall continue, is a matter solely for the consideration of the Society, and one in the decision of which we have no desire to interfere. There have been, however, one or two statements made in the discussion which justify some comment at our hands. Dr. Corbin's supposition that the present arrangement was due to the persuasive power exercised by the Editor upon members of the Branch is without foundation, as, excepting a casual remark to the Secretary, we have no recollection of having even mentioned it at the time of the Adelaide Congress. With regard to the cost, there also appears to be some misapprehension. With the desire of advancing the interests of the Medical societies and profession in Australia, and of making the *Gazette*, as much as possible, representative, the management of the paper agreed on condition that the South Australian Branch made all its members subscribers, to supply the paper to them at the cost at which it is supplied to booksellers and other agents taking it in quantity, in such time that the proceedings of one meeting are in their possession before the next; so that so far from the Branch having incurred greater expense than under the old system, it actually gets a special report of all its proceedings, and the *Gazette*, a professional paper circulating in every country in the world (even in Central Africa, for we have a subscriber high up on the Niger River) at whole-



sale price. We do not wish for one moment to endeavour to prevent the realization of Dr. Gardner's heart's desire to have a paper of his very own, but would point out that it would hardly be likely to have the outside circulation of the *Gazette*. We may also mention, incidentally, that a large proportion of the members of the Branch were subscribers at ordinary rates before the existing arrangement was made.—Ed. *A.M.G.*

#### QUEENSLAND MEDICAL SOCIETY.

THE General Meeting for the Month of February was held at Brisbane, on the 12th, at 8.30. p.m.

Present: Drs. Thomson, Forbes, Tilston, Edgelow, Booth, P. Bancroft, Hill, Shout, Little, W. S. Byrne, E. H. Byrne, Love.

Dr. W. S. Byrne showed an aneurism of the arch of the Aorta.

Dr. E. H. Byrne shewed a renal calculus, shaped like a date seed, which had been passed through the urethra.

Dr. Forbes read an interesting paper on "The treatment of Hyperpyrexia in sunstroke by the cold bath," which will appear in our next issue; Drs. Edgelow, Little, Thomson, Hill and Love joined in the discussion.

GENERAL Meeting held March 12th, at the School of Arts, Brisbane, at 8.30. p.m.

Present: Drs. Thomson, Gibson, Hill, Comyn, Hardie, O'Doherty, Edgelow, P. Bancroft, Hare, Tilston, Connolly, Booth, Shout, Lyons, W. S. Byrne, E. H. Byrne, Little, and Love.

DR. LYONS shewed a piece of strangulated bowel, which had been removed that day from a lad aged 17; the obstruction had lasted two days.

The minutes of last meeting were read and confirmed.

THE President reported that he had made arrangements for the use of the Divinity Hall, for future meetings of the Society. This had been necessitated by the small size of the room in the School of Arts, and its closeness in hot weather. The next meeting of the Society would be held in the Divinity Hall.

DR. EDGELOW read a lengthy paper on "The support of the Uterus in health and disease."

Owing to the lateness of the hour, discussion was postponed to a future date.

A number of instruments and pharmaceutical specialties were exhibited by Messrs. Elliott Bros., Limited.

#### THE MEDICAL SOCIETY OF VICTORIA.

THE monthly meeting of the Medical Society of Victoria was held in the hall of the Society, Albert-street, East Melbourne, on April 3, under the presidency of Dr. Balls-Headley. About 20 members were present.

DR. BAGE read an account of a case of kidney disease, and was followed by Dr. Jamieson, who read for Dr. Ross, of Macarthur, an account of a rare disease of the lung (croupous bronchitis). Dr. F. J. Owen narrated the history of a case of heart disease, and the description by Dr. Barrett of a new method of examining the nose and throat, brought the business to a termination.

#### NEW ZEALAND MEDICAL ASSOCIATION.

THE fourth annual meeting of the New Zealand Medical Association was held at the Public Library, Christchurch, on Tuesday, March 12, and following days. The business transacted was as follows:—

1. Inaugural Address by Dr. Anderson, President.
2. Incorporation of N.Z.M.A. as a branch of the B.M.A.
3. The Amended Registration Bill.
4. Public Hospitals charging for advice and medicine.
5. Should not the Medical Staff be represented on Hospital Boards?—Dr. Symes.
6. Contagious Disease Act.—Dr. Symes.
7. Establishment of Calf Lymph Stations at the four chief centres.—Dr. Symes.
8. Should not the Act specify what infectious diseases shall be reported?—Dr. Thomas.
9. The Code of Medical Ethics.
10. Public Health.
11. Shall the President of N.Z.M.A. be elected at each Congress?
12. "Ether as an Anæsthetic."—Dr. De Zouche.
13. "Dilatation of Kidney from Calculus in Ureter."—Dr. Batchelor.
14. "Hydatids of Brain."—Dr. Maunsell.
15. Paper.—Dr. De Zouche.
16. Paper.—Dr. Colquhoun.
17. "Some Remarks on rapid dilatation of Cervix Uteri," with exhibition of Dr. Duke's Dilator.—Dr. Hacon.
18. "Cerebral Abscess" (discovered *post mortem*).—Dr. Hacon.
19. "A unique use for Bullet Forceps."—Dr. Fitzhenry.
20. Pathological Exhibits.—Dr. Fell.
21. Pathological Exhibits.—Dr. Collins.
22. Microscopic Sections.—President.
23. Exhibition of a peculiar Worm, with notes.—Dr. J. Guthrie.
24. Pathological Exhibits.—Dr. King.
25. To decide time and place of next meeting of Congress.

The Congress decided that hospital charges for advice and medicine are demoralizing to the profession, and should not be allowed to remain in force. It was also resolved that representation should be made to local authorities in each centre as to the necessity for the profession being represented on the respective hospital staffs, either in the person of the chairman of the medical staff, or some representative thereof. The Congress unanimously decided that, in the interest of the community at large, it was necessary that the Contagious Disease Act should be brought into force without delay. On the question of vaccination it was suggested that more than one calf-lymph station should be established in the colony, but by the majority it was thought that one central station was sufficient at present.

NOTICE TO QUEENSLAND SUBSCRIBERS.—Having learned that a person named John Rattiff, in Brisbane, has been collecting monies on my behalf, I hereby inform subscribers to the *A.M. Gazette* in Queensland, that the said person has no authority to do so, and that his receipt will not be recognised.—L. BRUCK, Publisher *A.M.G.*

FOR TRANSFER.—A medical practice in South Australia, only condition being purchase of doctor's residence. Terms very easy. Climate excellent. Address, A.E., *Australasian Medical Gazette* Office, Sydney.



## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castlereagh Street, Sydney.*

*\*\* Contributors can have their Papers reprinted and published in Pamphlet form, at Cost Price, if the necessary instructions are given to the Publisher at the same time the contributions are sent in.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, APRIL 15, 1889.

## EDITORIALS.

## TINNED MILK.

THE want of a pure form of preserved milk is felt by none more than the up-country practitioner of Australia. In seasons of drought when fresh milk is unobtainable, children's illnesses become a source of anxiety to the medical attendant from the absence of suitable food, and resource is had to condensed milk in some form or other. The more frequent methods of preserving milk are by evaporating the fresh article to about one-fourth of its bulk, and with the addition of a considerable quantity of sugar, securely soldering the tins in which it is placed so as to totally exclude the air. The quantity of sugar added and the exact amount of evaporation employed varying in different brands, but forming the principal difference between them. One form only of unsweetened condensed milk is worthy of consideration, but even this (Löefflund's brand) is preserved by the addition of *non-injurious* foreign matter. Any process, therefore, which would exclude all but milk being used, is a distinct gain for those who are compelled to rely to a great extent on the preserved form for their supply of milk. This gain is even greater when the case of treatment of infantile disorder is considered, for it is evident that the addition of any foreign matter, sugar not excepted, diminishes the value of milk as a nutritious diet. Dr. Dahl, of Norway, has discovered a method of preserving milk by sterilization, of which the following description appeared in *The Scotsman* of February 4th:—

"The milk is taken direct from the cow, and, in the first place, is cooled down to ordinary temperature, about 50 degs., or 60 degs. Fah., and then hermetically sealed up in tins. In this state it is exposed to a temperature of about 160 degs., and kept at this for one

hour and three-quarters or thereabouts, after which it is allowed to cool down to 100 degs., at which it remains for some time. It is then quickly heated up again to the former temperature of 160 degs. This alternate heating and cooling is repeated in the same manner several times, and then finally the temperature is raised to the boiling point of water, or about 212 degs., after which it is cooled again to ordinary temperature, when it is found to be completely sterilized, not a trace of any organism or germ being left, and is, therefore, in a state in which it can be kept for an indefinite length of time without undergoing any change.

The milk is preserved for apparently any length of time in a perfectly fresh and sweet condition while its composition is quite unaltered, nothing being added to or taken away from the original milk. The tins have only to be opened, and the milk poured out and used as if fresh from the dairy. A company has been formed in London under the title of "Dahl's Pure Milk Company" to work the process, which is patented. An establishment has been erected in Norway to prepare the milk, whence it is exported to this and other countries. It thus promises to be a new industry which will utilize, for the benefit of the inhabitants of the United Kingdom, the dairy produce of the pastoral regions of Norway. Samples of this preserved milk have been submitted to various medical and other authorities, who report very favourably regarding it. Dr. Klein, the well-known authority on microbes and such small organisms, says he has been unable to detect the presence of any of these organisms, whether harmless or disease producing.

The preservation is complete, and there is not the least indication of sourness or any change whatever. The milk might have been brought directly from the dairy, and boiled, so far as its taste is concerned, and it forms a sweet and refreshing drink. One evident advantage which it possesses is, that it is not only absolutely free from ordinary germs which induce fermentive processes, but it is also free from any disease producing germs; for the same process which destroys the former also completely destroys the latter. This is a most important point, for ordinary milk carries disease germs with great facility, and many cases of fever, &c., have been traced to the agency of milk carrying diseases from infected persons connected with the dairy, and it is even held by many that animals suffering from tuberculosis communicate the germs of this disease to the milk, from which it passes to the human subject. Now whether this danger has been exaggerated or not, it is certain that it is entirely avoided in the case of this preserved milk. None of these diseases could be propagated through its means. For invalids, therefore, and for infants, whose vital powers are weak and less able perhaps to resist the attacks of disease germs than those of the strong and healthy, this milk seems particularly well suited, and even better than ordinary fresh milk, and we should imagine it will soon be introduced into our nurseries and hospitals. It may be added, also, that on the tins being opened, the milk does not rapidly turn sour, but may be kept for several days and still be fit for use, so thoroughly do the germs seem to have been destroyed. On the whole, the manufacture seems to be a distinct success, and well worthy the attention of all consumers of this valuable article of diet."

It would appear from this that in Dahl's milk we have a most valuable addition to our means of treating disease where fresh milk is unobtainable, and it should be welcomed by the profession as a material improvement in a direction where such, medically speaking, has been much wanted.

### UNQUALIFIED ASSISTANTS.

A CASE which recently occurred in this colony has caused some public attention to be paid to the question of the employment of unqualified assistants by medical men. Though, no doubt, there are some gentlemen who, having gone through a proper course of medical training, but who, from some unforeseen cause, have been prevented from obtaining diplomas, are well enough suitable to act in this capacity under the supervision of a qualified medical man, we cannot but earnestly condemn the practice, for without the employer takes care to announce to his patients who are attended by such an assistant that he has no diploma, he can hardly be acquitted of a fraud upon them for sending him when they ask the services of a qualified practitioner. With few exceptions, the absence of a diploma is proof that a man so deficient either had not gone through the prescribed course of study, or having gone through it, that he failed to pass his examinations either from lazy inattention to his studies, or from brainlessness.

The excuse which formerly existed for the employment of unqualified assistants, and the paucity of qualified men willing to accept such a position, no longer holds good, for men with every qualification have come in such numbers to Australia that the proportion of medical men to the population is as great, if not greater, than in England.

We cannot too strongly express our condemnation of the attitude of the qualified employer in this case, for he has adopted a defiant tone towards the expressed opinions of his medical brethren, of the coroner's jury at the inquest held on the body of the patient, of his assistant, and of the public generally, which is unjustifiable.

### THE ADMINISTRATION OF ANÆSTHETICS.

THE New South Wales Branch of the B.M.A. in formulating resolutions with regard to the ethics of the administration of anæsthetics, which we published in our last issue, has done good and practical service to the profession. Until this was done, every death from chloroform rendered the practitioner who was so unfortunate as to have a death—however unavoidable—occur during its administration, liable to a frequently unjust verdict of an ill-informed coroner's jury. We think the resolutions thoroughly meet the case, and the one pointing out the uncertainty of

electricity as a remedy, is especially useful; for, not only do we fully endorse the opinion expressed that its use is not unattended with risk, but cases frequently arise which, were the administration delayed until the necessary electrical apparatus was procured, increased danger would accrue to the patient; whilst, if the practitioner, doing what was best for his patient, administers the anæsthetic before it came, he, in the case of unavoidable death ensuing, rendered himself liable to cruel and unjust comment at the inquest.

### DR. BATCHELOR ON THE DUNEDIN HOSPITAL.

WE congratulate the Dunedin Hospital in having in Dr. Batchelor an Honorary Medical Officer, who is not only able, but also possesses the courage to make the—in our opinion—highly commendable protest against the state of management hitherto existing at this hospital, an abstract of which we append. We congratulate the trustees who remarked that, "the address was probably the roughest ever delivered to anybody" on their perceptive powers, and trust that they at the same time acknowledged that it was just and reasonable. We think Dr. Hislop, if his remark referred to Dr. Batchelor, a little out when he remarked "it brought to his mind the quotation 'Fools rush in where angels fear to tread,'" and suggest that in this case it should be altered to "Angels rush in where fools fear to tread." The protest referred to was read by Dr. Batchelor at a meeting of the Dunedin Hospital Trustees on February 27th. Referring to the startling charges made in a letter in the *Daily Times* by a late patient he said:—"I have reason to believe that every statement in Mr. Gray's letter has solid foundation in fact, and, further, I can if need be, advance evidence in proof of his statements. No arguments I have read have in the slightest degree controverted the facts he has brought forward as showing the necessity for trained nurses. He says male wardsmen have generally drifted into the position. They receive no special training, and, worse than all, have no special supervision." Dr. Batchelor then proceeded to urge the necessity for separate wards for diseases peculiar to women. He estimates that this can be met by an expenditure of £200. He says:—"To treat diseases peculiar to women in the general ward has a demoralizing effect upon the patients subjected to treatment, and to other occupants of the ward. Examinations such as have to be conducted cannot be carried out with even a modicum of decency in a large ward for general diseases. Young lads in their first and second years at the hospital walk freely in and out of the wards, even while

examinations are being conducted, and it is absolutely impossible, with the present accommodation, to check or mitigate the evil. The results consequent on the absence of special wards for serious operations is positively too terrible to contemplate. A woman suffering from ovarian dropsy entering into a general ward runs an unnecessary risk to her life, and a certain percentage of all cases operated upon here absolutely die for want of proper accommodation. Nothing can be more demoralizing to the doctor or the nurse than to know while operating, and after operation, that the patient has not that chance of recovery she should have, and that, however skilfully the operation may have been conducted—however carefully and anxiously the case may have been watched—that case may fail for causes which are entirely preventable with more favourable surroundings. During the years I have practised in this town I have been present at a great number of operations performed inside and outside this hospital. In private practice I cannot remember a single death the result of blood-poisoning following an operation. In the hospital practice I respectfully say I have seen several." He then proceeds to show the injustice to the honorary medical staff, who give their time and services for nothing, to be robbed, perhaps, of reputation through this faulty system. To show how readily it can be remedied, he points out that within a week he has collected £500 from twenty-four individual ladies. More can be got, and with the Government subsidy the thing could easily be done. He then proceeds to show the importance of the Medical School, and then instances several minor but urgent reforms needed. No provision is made for the night nurse heating food or poultices, getting hot water except by going to the kitchen in another part of the building. Then as to ventilation and sanitary arrangements, he says:—"I know of one case of typhoid which was actually bred and developed in the ward while the patient was an inmate undergoing treatment for some other disease. This case was solely due to the grossly insanitary condition of the hospital, and if that patient's relations had brought an action for damages against this committee it might have been mulcted in heavy damages. I say that the present arrangements of the drainage are opposed to the most elementary principles of hygiene, and should be at once rectified." He points out the absurdity of attempting to gauge economy by expenditure per bed, and asks:—"Is it economy to keep an unfortunate patient in the hospital eight weeks, when, with proper appliances and proper nursing that patient could have left at the end of four weeks in better health? Is it economy if a poor man should happen to

come in with a badly-fractured leg, and, in consequence of want of efficient nursing, poor attendance, defective ventilation, and an indifferent dietary scale, he leaves your hospital at the end of six months with a stump and wooden leg? whereas the same man, if his surroundings had been more favourable, might have left your ward sound in body and limb, and able to resume his ordinary occupation, instead of leaving a cripple, and most probably becoming a permanent incubus on the State." He then deals with the cry often raised, "Beware of the ratepayers," in which he said there was nothing, as the ratepayers would be quite content if the necessity for expenditure was shown. In concluding he says:—"You have undertaken onerous duties, and have apparently hardly appreciated their gravity. By the absurd provisions of an Act of Parliament you are appointed for a year to duties which it would take half a life-time to master. You must remember that in the acceptance of your posts here you have most high and noble duties to perform. You have to provide the means to attend to the wants of the sick, to soothe their pangs, and to ease the dying moments of those unfortunate women who are compelled, by the need of the cold world, to end their existence without the soothing hand or sympathizing voice of those near and dear ones, who we all hope may minister to us in our last moments. Gentlemen, I appeal to you as man to fellow-men, and I shall not appeal in vain." On finishing, several trustees remarked that the address was probably the roughest ever delivered to any body. Dr. Hislop said he thought, during its delivery, of the case of "fools rushing in where angels fear to tread" and they were evidently fools for thinking they could manage an hospital. The report was referred to the hon. medical staff.

## LETTERS TO THE EDITOR.

### URETHRAL CALCULOUS SAC.

(To the Editor of the A.M.G.)

SIR,—The following short account of a case of urethral calculous sac, which had been taken for stricture only for many years, may be of interest to your readers.

On the 14th January, 1886, I was called in consultation to see a case at the Terrace Gaol with Dr. Johnston, gaol surgeon. The prisoner, S—, was an Italian, and had already served some fourteen years. He was suffering from what appeared to be a long, gristly stricture in the urethra, and he told me that he had been troubled with a "stricture" for the last twenty

years. With some difficulty, and with the aid of chloroform, a No. 3 silver catheter was introduced into the bladder, a French instrument failing to enter the "stricture." The sensation the silver instrument gave to my hand was that of a passage over a long, tortuous, gristly surface of some thickness. On the 27th January 1886, on examining the parts about the anus, I found a hard swelling at the membranous portion of the urethra; and, Dr. Johnston giving chloroform, I operated on this swelling externally by a straight incision into the middle of it, got my forefinger into a large sac full of small stones, hooked them all out and then pushed my finger on as far as the neck of the bladder.

The stones were 27 in number, and rounded off so as to fit one into the other; they varied in size from that of a plum stone to small bits 2 mm. in diameter. The wound in the urethra healed soundly in three weeks, and the prisoner was discharged from gaol the next year.

He then went to Timaru, I believe, and while there had an operation performed on him of some kind, and I hear shortly afterwards died. I have not been able to get the particulars of his death.

I am, Yours, &c.,

G. GORE GILLON, M.B., C.M.

69 Willis Street, Wellington, New Zealand,  
19th February, 1889.

## REMOVAL OF UTERINE APPENDAGES DO NOT UNSEX.

(To the Editor A. M. Gazette.)

SIR,—I was charmed with Dr. Chambers' address in the last number of *The Australasian Medical Gazette*, and hereby heartily send him thanks for his remarks on Oöphorectomy. It may be interesting for him and your readers to have direct testimony that the operation of Oöphorectomy does not unsex. Whilst at work with Mr. Lawson Tait, he got me to make some enquiries upon this point, from patients who had BOTH ovaries removed. In not one could I get any history of diminished desire, but amongst many in whom it was decidedly increased were two very funny cases. The first was an old nurse about 45, who naively remarked in answer to my queries, "Well, I always did like it before I was operated upon, but now I never feel satisfied." The other case was a gentleman who consulted me whilst I was temporarily acting for Mr. Tait, he saying, that since the operation there was no satisfying his wife, and much as he should have liked it had he been 25, but being past 50, it was rather too much, and what did I recommend should be done. What would you, readers of

A.M.G., recommend in such a case? I must confess I shirked it, and referred him to Mr. Tait.—I am yours, &c.,

E. MATTHEWS OWENS.

Brisbane, March, 1889.

## SNAKE POISON.

(To the Editor of the A. M. Gazette.)

SIR.—As Dr. Müller attributes motives to me regarding my letter necessitating a reply to his communication in the A. M. G. of March, the Editor will do me a favour by allowing me space for a short reply. I certainly implied that Dr. Müller's paper took too little account of the "*Vis medicatrix nature*" and ordinary eliminative processes. Allow me to quote from Dr. Müller's letter one sentence: "I have already *shown conclusively* that snake poison causes *torpor and paralysis of motor nerve centres* and that this action is purely dynamic force, and *not tissue destroying*." The italics are mine. From the layman's case, reported in my letter, other and higher centres than motor centres were evidently affected. Such have been the results reported by medical men. Dr. Müller may have done experiments to show that the poison affects motor nerve centres in animals, but his paper does not record them, and my memory fails to recall experiments indicating any action on motor nerve centres only. Post-mortem records would also seem to oppose this idea, and effects on animals—even judging from my letter—indicate the affection of higher centres than motor (cf. curare, &c.). The statement that snake poison is *not tissue destroying* rests on evidence not named by Dr. Müller; the examination of the blood, in cases of snake poison, by Prof. Halford (Proc. Roy. Soc. Vict.) and others, certainly causes one to pause before finally accepting Dr. Müller's dictum. The results of action of apparently antagonistic poisons—e.g. paralyzers and convulsants—as determined by experiments on animals, showing results by no means satisfactory as regards recovery led to the publication of my letter. If nerves are worn out, so to speak, a little rest will do more good than a stimulant. Such was the gist of my final remark. In short, my idea was to favour elimination, and give rest; to endeavour as much as possible to obviate the risk of poisoning a person who has otherwise a *chance* of recovery. Such, I trust, will be meted out to me, if bitten by a snake.

Referring to the psychological element of Dr. Müller's letter, and the "Od," I am not aware that any recent science has shown any effect of animal magnetism in a person or animal, *who has lost the power of his higher mental faculties*—in short, who has lost consciousness. Mesmerists *always* produce their wonderful effects *short of absolute insensibility*. Braid, Haddock, Frankel, and others may be referred to on hypnotism.

There is a nerve destroying force known as fear. Persons have been known to die when afraid of being bitten by a snake or rabid dog, &c., and to recover from apparently imminent death on being assured that their fears were groundless. The effects of reassurance on the part of medical men is so much within the experience of all as to require no notice. For the evidence in favour of some of the wonderful "Od" effects and such like fallacies, let me refer to Hammond on Spiritualism, and Tyndall lectures, and also note the undermentioned case:

An intelligent lady assured me that when she burnt some henbane powder on live wood embers for tooth-

ache, invariably some maggots issued from the decayed tooth, and a cure was effected. The lady had acquired a far-famed reputation, and everyone subjected to treatment saw the maggots; other observers corroborated. When I explained the error to the lady she accepted my explanation, and afterwards smiled when she mentioned any popular remedy.

To simply mention that I have been called to persons apparently moribund, whom I had supplied previously with medicine, and that after my second visit left them cheerful and confident of recovery without change of medicine, is but to record experiences common to all medical men. Even animals have their favourite doctors, and can be handled readily by some in preference to others. This subject is too extensive for reference.

To mention massage in the same breath with the above appears to me to be rather far-fetched; had it been linked with gymnastics I could understand it.

Space is already, I fear, too much encroached on. I shall therefore conclude by stating my belief that Irish, Spanish and other miracles, so-called, and other phenomena outside the pale of science must receive extraordinary support before they come within the sphere of the credible. So also says John Stuart Mill, if I remember rightly. Let me add as a corollary "that phenomena explainable by known causes ought not to be referred to the supernatural or unknown causes"—*Vera causa of hypothesis*. (Induction.)

JOHN REID, M.A., M.D.

Melbourne, March 21, 1889.

#### A COMPLAINT.

(To the Editor of the A. M. Gazette).

DEAR SIR,—In the little country town in which it is my lot to reside there exists a hospital to which is attached a medical officer at a salary of £100 *per annum*. He and I are the only two local medical men. I have been practising here for the last 16 months, but the hospital committee and subscribers have not thought it worth while to appoint me even to an honorary position in the institution. Once, when the subject was mooted at a meeting of the committee, this body of gentlemen declared themselves incapable to create an unpaid appointment, shelving the *onus* of that duty on the subscribers. As regards the official functions of the committee, this coterie of philanthropists is in the habit of voting money away for necessary purposes; yet, when they were asked to accept a nomination, provisionally, they became so nervous and timid—so fearful of giving offence to the "powers that be," by altering, in any way, the working machinery of the institution, that they declined to accept the responsibility; thus showing, as I think, how imbecile they were to act. The annual meeting of (sapient?) subscribers was held in due course; but the subject of appointing an extra surgeon was not so much as mentioned. In the absence from home of the usual doctor, his hospital duties are performed by the local chemist, who, I fancy, is chloroformist. My claims to recognition being so overlooked, I am, as a result, placed in a false position in the town. But this is not all; for it must follow—if I am in error, pray correct me—that I cannot send a suitable case to the hospital without relinquishing all control over him; and this at a time when enteric fever is rife. I may explain that the hospital is admirably situated in a sanitary sense, occupying a commanding position on an adjacent hill—the best possible. Here everything moves in a small

circle; kissing by favours, and favours by kissing, *usque ad nauseam*. So the old *régime* continues in full force, the hospital being virtually a private preserve. It is in a "flourishing condition," financially speaking. It is supported by voluntary contributions, aided by a Government grant. I write in the interests of the common weal. If you consider that the above affords reasonable grounds of complaint, I trust to your powerful influence to put a stop to the proceedings here set forth. I enclose my card, and am

Yours truly,

KAPPA.

April 1st, 1889.

[We are not in possession of sufficient information to criticise the action complained of by our correspondent—Ed. A.M.G.]

#### CONSUMPTIVE TRAVELLERS.

ORIENT STEAM NAVIGATION COMPANY, LIMITED,

13 FENCHURCH AVENUE,

LONDON, E.C., 5th Feb., 1889.

THE HON. J. M. CREED, M.L.C.,

*Australasian Medical Gazette's Office,*  
*Sydney.*

DEAR SIR,—We have to thank you for the reprint from THE AUSTRALASIAN MEDICAL GAZETTE, of an article on "Consumptive Travellers," by Dr. MacMullen.

This is a subject with the importance of which we have been fully impressed for some considerable time, but as the steamers of the Orient line are under the Passenger Acts, we are precluded from introducing into the Passenger Contract ticket, stipulations, giving the owners power to refuse to carry consumptives, and other persons in a condition of health to be dangerous to their fellow passengers, unless under exceptional circumstances. We have frequently applied to the Board of Trade here for permission to introduce stipulations with the above object, and we are glad to say that shortly before your communication reached us the Board of Trade had consented to meet us in some way in this matter, and we are now in communication with them on the subject.

We may mention for your information that occasionally the authorities in Australia insist on placing on board our vessels for conveyance back to England distressed British subjects in the last stage of consumption. This is a great injustice to the third-class passengers, in whose midst such unfortunate sufferers are placed, and we have protested against it, but in vain.

We observe that Dr. MacMullen suggests as a remedy that the Medical Officer should have the power to remove a consumptive passenger into the ship's hospital. He appears to forget that the hospital space is limited and is needed for the reception of passengers who fall ill by the way. Such accommodation is not intended for the reception of consumptives, and if so used there would be no place in which to isolate contagious cases arising on the way.

We are, dear Sir,

Yours faithfully

(For the Managers),

S. WAYMOUTH,

Secretary.

## THE MONTH.

### NEW SOUTH WALES.

THE Senate of the University of Sydney have requested the Vice-Chancellor, the Hon. Dr. MacLaurin, to inquire into the question of the registration of the medical degrees of the University in the "British Register of Medical Practitioners," and to take such steps during his approaching visit to Europe as may seem best to him in the interests of the University and its medical graduates in respect to the registration as medical practitioners in the United Kingdom.

THE Vice-Chancellor of the Sydney University (the Hon. Dr. MacLaurin, M.L.C.), was, on Monday evening, March 24, entertained at dinner by the teaching staff of that institution and the superior officers. Professor Stephens was in the chair, and the Chancellor (Sir W. Manning) was also present by invitation. The dinner was given to show the esteem in which the Vice-Chancellor is held by the staff of the University for his able and indefatigable services during his tenure of office, which expired at the end of March, and to bid Dr. MacLaurin farewell on the eve of his departure to the mother country.

THE Senate of the University of Sydney have placed on record its sense of the zeal and ability displayed by Dr. MacLaurin while holding the office of Vice-Chancellor.

MR. JOHN HARRIS, Mayor of Sydney, has handed a cheque to the Senate of the University of Sydney for the sum of £1000 for the formation of a scholarship to be awarded for proficiency in the subject of the Second Medical Examination.

DRS. THOMAS DIXSON and W. C. Wilkinson have been elected Honorary Physicians, Dr. A. M'Cormick Honorary Surgeon, and Drs. L. G. Davidson and T. F. Wade Resident Medical Officers at the Sydney Hospital.

THE Broken Hill Proprietary Company have given £500 to the Broken Hill Hospital.

THE following students, at the University of Sydney, have passed the examination for the degrees of Bachelor of Medicine and Master of Surgery:—A. Henry, J. W. Hester, H. V. C. Hinder, P. J. Kelly, A. E. J. M'Donnell, A. E. Mills, R. B. Trindall, B.A.

DR. C. F. CRIPPS, late of Rockhampton (Qu.), has commenced practice in Elizabeth-street, Hyde Park Sydney.

DR. F. G. FAILES, of Coonabarabran, has sailed for London by the s.s. "Australasian" on a six month's trip. During his absence his practice will be carried on by Dr. H. W. Gardner.

DR. T. C. FISHER, late Resident Surgeon at the Sydney Hospital, was, on Thursday evening, April 4, entertained by a number of his brother practitioners at a dinner at Compagnoni's on the occasion of his leaving the hospital and going into private practice.

DR. B. B. FLOYER has removed from Gulgong to Minmi, in a coal mining district, 89 miles N. of Sydney.

DR. JAMES GRAHAM, late Medical Superintendent at the Prince Alfred Hospital, has commenced practice at 4 Hyde Park Terrace, Liverpool-street, Sydney.

DR. THOMAS HARRISON has removed from Bodalla to Brewarrina, where he has been appointed medical officer of the local hospital, *vice* Dr. Hawkins, resigned.

DR. T. J. HENRY, late resident medical officer at the Sydney Hospital, has commenced practice at Warialda, 380 miles N. of Sydney, where he has been appointed medical officer of the local hospital; there were 16 applicants for the position.

DR. C. F. PORTER has removed from Nhill (Vic.) to Balranald, on the Murrumbidgee river, 554 miles S.W. of Sydney.

DR. R. F. READING, of 189 Elizabeth-street, Hyde Park, Sydney, has commenced practice as a specialist for all injuries and diseases of the mouth and jaws.

DR. G. E. RENNIE has commenced practice at Phillip-street, Sydney.

THE Hon. Dr. Arthur Renwick, M.L.C., has been elected Vice-Chancellor of the University of Sydney for the ensuing year.

DR. B. B. SCHWARZBACH has returned to the colony after an absence of twelve months in the old country, and has resumed practice as a specialist for diseases of the eye and ear, at 151 Macquarie-street, Sydney.

PROFESSOR ANDERSON STUART, M.D. Edin., has obtained the degree of M.D. (*a.e.g.*) of the University of Sydney.

DR. W. G. TAYLER, late of Wagga Wagga, has taken rooms at 155 Macquarie-street, Sydney.

DR. E. YEATES has removed from Warialda to West Maitland.

### NEW ZEALAND.

THE death is announced of Dr. William Deamer, M.D. Aberd. 1860, M.D. (*a.e.g.*) N.Z. 1873, M.R.C.S. Eng. 1854, L.S.A. Lond. 1856, one of the oldest medical men at Christchurch, who died rather suddenly on March 12, it is supposed, from apoplexy. Dr. Deamer, at the time of the fatal seizure, was attending a meeting of the Medical Society. He suddenly fell to the ground and died immediately. He was 59 years old, and arrived here in 1863. He was a prominent Mason, and the only one in Christchurch who had received the 33rd degree, which was conferred on him ten years ago during a visit to England by the Prince of Wales. He received the appointment of Past Director of Ceremonies to the Grand Lodge of England in celebration of Her Majesty's jubilee. He was admitted to the Order of the Knight Templars, and opened the first preceptory at Christchurch.

THE Council of the Otago University have elected Dr. Maunsell, of Dunedin, Lecturer on surgery for three years at a salary of £150 per annum.

DR. H. H. COCKERTON has commenced practice at Stratford, 25 miles S.E. of New Plymouth.

DR. T. R. KING, late of the Seacliff Asylum, near Dunedin, has been appointed Medical Superintendent of the Auckland Asylum, *vice* Dr. Cremonini, resigned.

DR. B. S. LAWSON, late of the s.s. "Tongariro," and formerly of 12 Harley-street, London, has been selected from five candidates to be resident surgeon of Timaru Hospital.

DR. P. A. LINDSAY, who has filled the post of Resident Surgeon at the Auckland Provincial Hospital for the past two years, being about to enter into private practice with Dr. Haines, has been presented by the resident staff of nurses, cooks, and porters with three handsome silver-mounted fruit stands, with centrepiece for flowers, and a pair of massive silver nut crackers, as a mark of their deepest esteem for him.

DR. W. STEWART, late of Dunedin, has removed to Woodville, 100 miles S.W. of Napier.

## QUEENSLAND.

THE Queensland Government have given an honorarium of £500 each to MM. Germont and Loir, M. Pasteur's representatives, for their experiments with the artificial cultivation of the virus of pleuropneumonia. In handing over the cheques the Government conveyed to M. Germont an expression of opinion to the effect that the investigations and discoveries of himself and colleague must prove of inestimable benefit to the colony.

DR. H. W. BROWNRIGG, of Goondiwindi, has been selected from fifteen applicants for the position of Surgeon to the Hospital at Port Douglas, on the shores of Trinity Bay, 1,000 miles N.W. of Brisbane.

DR. W. CUMMING, who has lately been acting as *locum tenens* for Dr. Nicoll, of Tambo, has been appointed Medical Officer of the Victoria Hospital at Barcaldine, *vice* Dr. Paul, resigned.

DR. E. R. HUNTER, late of Coonamble (N.S.W.), has commenced practice at Mount Morgan.

DR. AENEAS JOHN M'DONNELL, B.M. et Ch.M. Syd., a native of Brisbane, has been appointed Resident Surgeon to the Toowoomba Hospital.

DR. M. MAGILL, late of Thargomindah, has removed to Goondiwindi, close to the N. S. Wales border, 208 miles S.W. of Brisbane.

DR. G. O. WILLIS has removed from Barcaldine to Winton, a rising township in a pastoral district, 1030 miles N.W. of Brisbane. Dr. Willis has been appointed Medical Officer of the Winton Hospital.

## SOUTH AUSTRALIA.

DURING the year 1888, 2,003 patients were admitted into the Adelaide Hospital, 180 of whom died; the average daily number of patients in the Hospital was 184, and the average number of days which patients discharged during the year have been in the Hospital was 31; the annual cost of each in-patient was £49 13s. 3½d. The number of attendances of out-patients treated was 10,983, and the total annual expenditure £9,875 11s. 7d. The statistics for the year, as compared with those of 1887, show the following increases, viz.:—108 in the number of patients admitted, 429 in the number of attendances of out-patients, £188 17s. 8d. in the total annual expenditure, 12 in the average daily number of patients in the Hospital, and 30 in the number of deaths of in-patients. 235 patients were sent to the Convalescent Hospital, Semaphore, at a cost to this institution of £219 8s. 6d. The number of cases of enteric fever treated shows an increase on the preceding year, the deaths, however, bearing a lower percentage; in 1887 there were 161 cases and 19 deaths, and in 1888 there were 177 cases and 15 deaths. The principal causes of death were—Phthisis, 33; enteric fever, 15; and heart disease, 18. Of the total number of deaths (180) during the year 22 occurred within 24 hours of admission, and 49 within 7 days of admission. During the past year there were 464 operations performed, of which 347 proved successful, 20 were unsuccessful, 74 patients were relieved, and 23 died.

## TASMANIA.

DR. GEORGE H. GIBSON has commenced practice at Hobart as a Homœopathist.

## VICTORIA.

DURING the week ended March 23 the Central Board of Health have recorded 191 cases of typhoid, seven having proved fatal. This is exclusive of 25 cases which were admitted to the Alfred Hospital since the 15th. The number of cases of typhoid reported during the week ended March 30, was 212, with 12 of them fatal. The total number of cases for the season since December is over 2500.

MR. ROBERT GILBERT, M.B. et Ch. M. Glas. 1880, late of Tarnagulla, is dead.

MR. HENRY HERVE WOOLHOUSE, M.R.C.S. Eng., 1849, formerly of North Brighton, near Melbourne, died on board the R.M.S. "Parramatta," on January 30, at the age of 62; the deceased gentleman arrived in the colony in 1849.

WE regret to have to record that Dr. Oliver Grenville Taaffe, practising at Rochester, was shot by his dispenser, J. C. D. Gaffney, on April 1. Gaffney, it appears, gave notice to leave; but Dr. Taaffe suspecting that all was not right, refused to allow him to leave until the books were overhauled. Gaffney borrowed a double-barrelled gun, ostensibly to have a day's sport; however, shortly after 3 o'clock, as Dr. Taaffe was getting into his buggy from the Rochester Hotel, Gaffney fired at him from the balcony and then blew his own brains out. Dr. Taaffe was picked up and conveyed to his surgery, where it was found that his right shoulder, back, neck, and head had been severely injured by the shot. Drs. Hinchcliff and Macgillivray, of Sandhurst, have been attending Dr. Taaffe; the former gentleman states that he has every hope of recovery on the part of the patient. Most of the shot in the shoulder lodged just under the skin or in the muscles, but there are a few pellets in the neck which may prove troublesome. There is also a danger of the shot having penetrated to the lungs.

CLASSES in connection with the St. John's Ambulance Association have been formed at East Melbourne, with Dr. Rothwell Adam as lecturer; at Beaufort, with Dr. Basil Adam as lecturer; and at South Yarra, with Dr. Bage as lecturer.

DR. AUBREY BOWEN, of Melbourne, one of the Victorian Commissioners for the Paris Exhibition, was entertained at dinner, prior to his departure for Europe, by the Medical Society of Victoria, with which he has been connected for more than 20 years.

DR. E. J. MCCARDEL has commenced practice at Wangaratta.

DR. C. DRINKWATER, late of Broken Hill (N.S.W.), has commenced practice at Nathalia, 139 miles N. of Melbourne.

DR. JAMES EADIE, JUN., on leaving Sandhurst for Melbourne, was entertained at a banquet on March 22, and presented with a case of surgical instruments.

DR. JOHN M'INTYRE EADIE, of Sandhurst, has been appointed medical officer to the United Friendly Societies, at a salary of £500 per annum. A large number of applications were received. Dr. John Eadie is a brother of the retiring officer, Dr. James Eadie, Jun.

DR. F. MILLER JOHNSON has entered into partnership with Dr. C. E. Gray, of Ferrars-place, Albert Park, South Melbourne.

DR. G. B. D. MACDONALD, a new arrival, has settled at Tarnagulla, 140 miles N.W. of Melbourne.

DR. J. J. MILLER, late of the Melbourne Eye and Ear Hospital, has commenced practice at Brunswick, a suburb of Melbourne.

DR. W. WARREN has returned from his trip to Europe, and resumed practice at Studley Park Road, Kew.

### PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners by the respective Boards:—

#### NEW SOUTH WALES.

Givin, Robert Daniel, L.R.C.P. Edin., 1883; L.R.C.S. Edin., 1883.  
Thomas, David, L.R.C.P. Lond., 1886; M.R.C.S. Eng., 1884; F.R.C.S. Eng., 1887.  
Mead, Riva, M.B. Univ. Edin. 1889; M.S. Univ. Edin. 1889; M.R.C.S. Eng. 1883.  
Bennie, George Edward, M.B. Univ. Lond. 1888; M.R.C.S. Eng., 1887.

#### QUEENSLAND.

Hunter, Robert Rankin, M.B. & Ch.M. Glas., 1883; M.R.C.S. Eng., 1884.  
MacNamara, Matthew, L. & L. Mid., K.Q.C.P. Irel., 1884; L.R.C.S. Irel., 1883.  
Moore, John Irwin, L.R.C.S. Irel., 1884; L. & L. Mid. K.Q.C.P. Irel., 1887.  
Kelleher, William, M.B. Roy. Univ. Irel., 1888.

#### VICTORIA.

Johnson, Frederick Miller, M.B. & Ch.M. 1886, M.D. 1888, Edin.  
Macdonald, George Bothwell Douglas, M.B. & Ch.M. Aberd., 1887  
Bagshaw, Thomas Washington, M.D. Camb., 1886.  
Swindells, John Adam, M.R.C.S. Eng., 1879.

### MEDICAL APPOINTMENTS.

Armstrong, William George, M.B. & Ch.M. Syd., to be Govt. Medical Officer and Vaccinator for the district of Merriwa, N.S.W.  
Bernays, Sidney Adolphus, M.R.C.S.E., to be Health Officer for shire of Buln Buln, Vic.  
Cockerton, Henry Herbert, F.R.C.S. Edin., to be Public Vaccinator for the district of Stratford, N.Z.  
Drinkwater, Charles, M.R.C.S. Eng., L.R.C.P. Lond., to be Health Officer for shire of Numurkah, W.R., Vic. Also Public Vaccinator at Nathalia, Vic.  
Hope, Thomas Cuibertson, M.B. & Ch.M. Glas., to be Health Officer for shire of Bannockburn, Vic.  
Ingoldby, Frederick John, M.R.C.S. Eng., L.R.C.P. Edin., to be Resident Medical Officer and Health Officer at Albany; also to be Public Vaccinator for the urban and suburban district of Albany, and the rural district of Plantagenet, W.A., *vice* L. H. Smith, L.R.C.S.I., &c.  
Johnson, John, M.B. Melb., F.R.C.S. Eng., to be Officer of Health at Mount Gambler, S.A., *vice* Dr. Powell, resigned.  
McCardel, Edward John, M.D., to be Public Vaccinator at Wangaratta, Vic.  
McCormick, Alexander, M.D., & Ch.M., Edin., M.R.C.S.E., to be an additional Vaccinator for the city of Sydney and suburbs.  
Macdonald, George Bothwell Douglas, M.B. & Ch.M., Aberd., to be Health Officer for Tarnagulla, Vic.  
Routh, William, M.R.C.S.E., to be Government Medical Officer at Georgetown, Q.  
Stewart, William, M.D. Glas., L.R.C.P. Lond., L.R.C.S. Edin., to be an additional Public Vaccinator for the districts of Woodville and Danevirke (Hawke's Bay), N.Z.

MR. W. SHEPPERSON, the representative in the Colonies of Messrs. Burroughs, Wellcome & Co., of London, is about leaving the Colonies for London, *via* the Brazils, and does not intend returning to the antipodes, but thinks of settling in London, where more important work is demanded of him by his firm, with which he has been connected for so many years. Mr. Shepperson is well-known to most medical men throughout the Colonies, he having attended the meetings and given demonstrations of the action of different preparations at nearly all of our medical societies; moreover, both at the Adelaide and Melbourne Intercolonial Medical Congress Mr. Shepperson brought his firm's products under the notice of the profession.

### VITAL STATISTICS OF MELBOURNE AND SUBURBS (GREATER MELBOURNE) FOR THE YEAR 1888.

THE estimated population of Greater Melbourne at the end of the year was 437,785. The total number of births during the year was 15,645 (37.30 per 1000), and of these 8,001 were males, and 7,644 females, whilst the total number of deaths was 8,606 (20.52 per 1000), viz.: 4,742 males, and 3,864 females. As regards the ages at death, 2,687, or 31.22 per cent. of the whole were under 1 year of age, and 888, or 10.32 per cent. were from 1 to 5 years of age, and 386 persons, or 4.49 per cent. died at the age of 75 years or upwards. Respecting the causes of deaths, 1,163 deaths were ascribed to zymotic diseases (diarrhoeal diseases, 546; typhoid, 326; diphtheria, 140; puerperal fever, 41; scarlet fever, 17; syphilis, 19; measles, 15; whooping cough, 10, etc.); 28 to parasitic diseases (hydatids, 21); 122 to dietetic diseases, (alcoholism, 70; delirium tremens, 18; want of breast milk, 34); 1,492 to constitutional diseases, (cancer, 232; phthisis, 904; tubercular meningitis, 136; tabes mesenterica, 120); 562 to developmental diseases, (premature birth, 276; old age, 227); 3,910 to local diseases, (convulsions, 200; apoplexy, 181; inflammation of the brain, 93; insanity, 97; heart disease, 556; pneumonia, 351; bronchitis, 327; croup, 129; diseases of the stomach, 406; enteritis, 155; diseases of the liver, 221; Bright's disease, 131; diseases of parturition, 55, etc.); 471 deaths were due to violence, and 858 were ill defined and not specified causes.

### BIRTHS, MARRIAGES, AND DEATHS.

\* \* The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcement.

#### BIRTHS.

CUSCADEN.—On the 19th March, at Port Melbourne, the wife of Dr. Cuscaden, of a daughter.  
HOWARD.—On the 17th March, at North Fitzroy, Melbourne, the wife of G. T. Howard, M.D., of a son.  
MOORE.—On the 17th March, at East Melbourne, the wife of W. Moore, M.D., Ch.M., of 87 Spring-street, of a daughter.  
O'REILLY.—March 10, the wife of Walter W. J. O'Reilly, M.D., Hyde Park, Sydney, of a son.  
PAUL.—On the 26th February, at Sandgate, Queensland, the wife of Dr. Frederick Paul, of a son.  
SCHIEL.—On the 9th March, at Cheltenham, Victoria, the wife of Dr. Schiel, of a son.

#### MARRIAGES.

BARKER-MANTON.—On the 4th March, at St. Mary's, Camfield, near Melbourne, Gertrude Evelyn, fourth daughter of F. J. Manton, South Yarra, to Walter Herbert Barker, M.R.C.S., L.R.C.P., B.A., Cantab., M.A., Melb., of Kew.  
KEOGH—HEWLETT.—On the 4th March, Arthur G. Keogh, M.B., Ch.M., St. Kilda, Melbourne, to Edith Louise, only daughter of Thomas Hewlett, M.R.C.S., Fitzroy.  
LONG—FITZHARDINGE.—On the 5th March, at Wagga Wagga, N.S. Wales, by the Ven. Archdeacon Fownall, B.D., Dr. St. Clair Andrew Long, to Katherine Ellen, daughter of H. B. Fitzhardinge, Solicitor, Wagga Wagga.  
LOOSLI—GOWAN.—On the 7th March, at St. George's Church, Malvern, by the Rev. Cannon Chase, Robert James Loosli, M.B., Ch.B., of Camberwell, Victoria, to Agnes Elizabeth, eldest daughter of the late John D. Gowan, of Toorak.  
MUNRO—M'LEAN.—March 20, by the Rev. W. G. McConchie, M.A., William John Munro, B.A., M.B., Ch.M., M.R.C.S., Eng., of Glebe, Sydney, to Flora Charity, eldest daughter of Donald Martin M'Lean, Esq., of the Crown Station, Capertee.

MR. BRUCK has received a full supply of Burroughs' new duplicate Prescription Books, interleaved with tissue paper, complete with copying sheet, price 4d. each, or 3s. per doz. Mr. Bruck can also supply Burroughs' Medical Diary for 1889, in leather cover, price 3s. 6d., post free.



## VITAL STATISTICS OF THE FOUR PRINCIPAL BOROUGHES IN NEW ZEALAND DURING THE YEAR 1888.

THE number and rates of births were less than in 1887. In that year there were 3,153 births in the four boroughs, in 1888 only 2,951—a difference of 202. The birth-rate in Wellington fell from 35·66 to 34·51 per 1,000 of population; that of Christchurch, from 28·15 to 23·99; and that of Dunedin, from 26·52 to 22·89. As a birth-rate could not be given for Auckland for 1887, the data as to population in that year not being sufficiently accurate, no comparison can be made between the birth-rates for the two years; but in 1888 the rate was 5·86 per 1,000 less than that for Wellington. The death-rate was higher in Wellington than in either of the other boroughs. To some slight extent this was due to a higher birth-rate, as a considerable percentage of children born die under twelve months of age; thus, an increase in the number of births involves an increase in the number of deaths. This cause is, however, insufficient in itself to account for the high death-rate in Wellington. In Auckland, with a mean population of 35,639, there were 1,021 births and 374 deaths; in Wellington, with a population of 28,655, there were 989 births and 376 deaths. Thus, with a smaller population and fewer births, there were more deaths in Wellington. The deaths in all the boroughs numbered 1,299 in 1887, and 1,209 in 1888, a decrease of 90; but while deaths of infants under 1 year were less numerous by 123 in 1888, and of those from 1 to 5 years by 25, those of persons over 5 years of age were more numerous in 1888 by 58. The following were the several death-rates for the past four years:—

		Deaths per 1,000 of the Mean Population.			
		1885.	1886.	1887.	1888.
Auckland ...	...	14·95	14·42	...	10·49
Wellington ...	...	14·89	17·02	15·55	13·12
Christchurch...	...	14·87	13·31	13·17	11·36
Dunedin ...	...	12·57	12·69	11·65	11·40

*Infantile Mortality.*—There was a marked decrease in the rate of infantile mortality in 1888 in three out of the four boroughs, the exception being in Christchurch:—

Boroughs.	Total Births.	Deaths of Children under 1 Year.		Proportion of Deaths of Children under 1 Year of Age to the 100 of Total Births.		
		1888.	1887.	1886.	1887.	1888.
Auckland ...	1,021	116	...	17·31	14·40	11·36
Wellington ...	989	103	...	17·26	16·16	10·41
Christchurch...	393	52	...	15·03	12·25	13·23
Dunedin ...	548	40	...	11·25	10·09	7·30

The mortality of children under 5 years of age was, in proportion to the total number of deaths, much less in each of the boroughs in 1888 than in 1887, but, as in previous years, the proportions were less in Christchurch and Dunedin than in the other two boroughs:—

Boroughs.	Total Deaths.	Deaths of Children under 5 Years.		Proportion of Deaths of Children under 5 Years of Age to the 100 Deaths at all Ages.		
		1888.	1887.	1886.	1887.	1888.
Auckland ...	374	160	...	53·85	51·46	42·78
Wellington ...	376	135	...	49·75	49·18	35·90
Christchurch...	186	64	...	46·65	36·19	34·41
Dunedin ...	273	55	...	34·80	28·62	20·15

The decrease in the proportion of these deaths in Dunedin is very great. It will be observed that there was also in Dunedin a remarkable decrease in the mortality of infants under 1 year of age.

*Specific Febrile or Zymotic Diseases.*—The *e* diseases caused 179 deaths in 1888, against 274 in 1887. The most fatal in this class were the following:—

	1886.	1887.	1888.
Diarrhoeal ...	159	154	72
Typhoid Fever ...	37	38	40
Whooping-cough ...	31	34	14
Diphtheria ...	20	20	24

12 out of the 24 deaths from diphtheria occurred in Wellington. Of 96 deaths in the four boroughs from diphtheria in the four years 1885–88 inclusive, 45 occurred in the borough of Wellington. The number of deaths in 1888 from typhoid fever was greatest in Auckland, 18, and next greatest in Wellington, 10; but the number of deaths from this cause for the past 4 years was greatest in Wellington.

DEATHS FROM Typhoid Fever.						
	1886.	1886.	1887.	1888.	Totals.	
Auckland ...	9	17	7	19	52	
Wellington ...	11	13	21	10	55	
Christchurch ...	2	2	6	4	14	
Dunedin ...	4	5	4	7	20	

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*Constitutional Diseases.*—The deaths in this class numbered 247, of which 116 occurred from phthisis, viz. 38 in Dunedin, 35 in Wellington, 27 in Auckland, and 16 in Christchurch. Cancer caused 63 deaths, being an increase of 7 on the number in 1887. The mortality was greatest in Dunedin, 27 deaths, and next in Wellington, 20 deaths. Auckland took next place with 14 deaths, and in Christchurch there were only 2 deaths from cancer.

*Local Diseases.*—These diseases caused 573 deaths, or 47·40 per cent. of the total number. Of these, the diseases of the respiratory system were most fatal, having caused 153 deaths, of which 61 were from bronchitis, and 42 from pneumonia. Of the deaths from these two last-named diseases, 40 occurred in Wellington, 29 in Auckland, 22 in Dunedin, and 12 in Christchurch. In proportion to population these deaths were also most numerous in Wellington. Diseases of the nervous system caused 150 deaths, of which apoplexy, infantile convulsions, inflammatory diseases of the brain, and paralysis were the principal causes.

## REPORTED MORTALITY FOR THE MONTH OF FEBRUARY, 1889.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from										
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.	
N. S. WALES.															
Sydney .....	132,846	296	200	107	...	...	5	1	8	31	11	8	4	1	
Suburbs .....	215,849	724	342	210	..	2	12	3	13	36	26	8	10	3	
NEW ZEALAND.															
Auckland .....	35,858	73	28	17	...	...	...	2	...	6	1	4	...	...	
Christchurch .....	16,455	20	21	16	...	...	...	...	...	12	1	...	...	...	
Dunedin .....	23,546	46	24	6	...	...	...	...	...	4	4	1	5	...	
Wellington .....	29,075	65	32	20	...	...	...	...	...	11	...	1	3	...	
QUEENSLAND.															
Brisbane .....	51,689	195	86	43	}	...	1	2	15	16	6	1	...	...	
Suburbs .....	21,960	115	30	20											
SOUTH AUSTRALIA .....	312,813	548	324	144	...	...	10	...	17	35	18	20	15	2	
Adelaide .....	43,750	72	59	23	...	...	2	...	1	2	7	3	3	1	
TASMANIA.															
Hobart .....	32,167	81	61	24	...	...	1	...	4	7	2	7	...	...	
Launceston .....	20,293	43	64	32	...	...	...	...	10	11	4	...	4	...	
Country Districts .....	93,841	...	...	...	...	...	...	...	...	...	...	...	...	...	
VICTORIA.															
Melbourne .....	75,400	128	84	485	...	1	19	7	64	83	76	41	21	5	
Suburbs .....	362,385	1,195	856												

## METEOROLOGICAL OBSERVATIONS FOR FEBRUARY, 1889.

STATIONS.	THERMOMETER.					Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.			Depth.	Days.		
							Inches			
Adelaide—Lat. 34° 55' 33" S.; Long. 138° 36' E. ....	...	...	...	...	...	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S.; Long. 174° 49' 2" E. ....	145°	80°	67° 1	55°	...	...	4·040	9	71	...
Brisbane—Lat. 27° 28' 3" S.; Long. 153° 16' 15" E. ....	155° 8	94° 6	77° 1	61° 8	29·989	...	2·002	8	80	N. ...
Christchurch—Lat. 43° 32' 16" S.; Long. 172° 38' 59" E. ....	146°	89° 4	62°	36° 4	...	...	·056	2	61	N. ...
Dunedin—Lat. 45° 52' 11" S.; Long. 170° 31' 11" E. ....	139°	81°	58° 8	42°	...	...	·192	7	76	N. ...
Hobart—Lat. 42° 53' 32" S.; Long. 147° 22' 20" E. ....	...	95°	62° 5	44° 7	29·854	...	1·57	12	68	N. ...
Launceston—Lat. 41° 30' S.; Long. 147° 14' E. ....	...	91°	67° 8	44° 6	29·904	...	0·72	5	56	N. ...
Melbourne—Lat. 37° 49' 54" S.; Long. 144° 58' 42" E. ....	...	96°	65° 9	45° 5	29·887	...	1·50	7	...	N. ...
Sydney—Lat. 33° 51' 41" S.; Long. 151° 11' 49" E. ...	...	96·6	71° 9	57° 6	29·965	...	2·7	9	75	E. ...
Wellington—Lat. 41° 16' 25" S.; Long. 174° 47' 25" E. ....	139°	79°	63° 2	48°	...	...	1·480	7	72	...

# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### NOTES OF FOUR CASES OF VESICAL CALCULUS.

By G. E. TWYNAM, L. R. C. P., LOND.,  
M.R.C.S.E., HON. SURGEON PRINCE ALFRED HOSPITAL, SYDNEY.

A. A., aged 59. Four years ago patient suffered from stone; lithotripsy was done, and the next day median lithotomy. Six months later the symptoms returned; he then had the lateral operation done. At the end of another six months the same operation had to be repeated for a fresh concretion. Patient was admitted at the end of August, 1888, complaining of piles and straining in making water. On sounding, another stone was found.

On September 12 the suprapubic operation was done. The bladder was washed out and then distended with 10 ounces of boro-glyceride solution—a large sized Barnes' bag was used to distend the rectum. A uric acid stone weighing 9 drachms 3 grs. was removed. The bladder wound was united by seven catgut sutures, and two deep silk sutures united the recti; a small drainage tube was placed in the superficial wound down to the bladder. No catheter was used throughout. Temperature only twice reached 100 degrees. The patient passed water naturally in four hours after operation. On 15th the sutures in abdominal wound were removed. Suppuration occurred along the track of the silk sutures which delayed the healing, but no urine came through. On September 22, patient was allowed to get up though some suppuration still continued. By Oct. 16 the wound was soundly healed, except at one spot. Discharged cured on Oct. 26.

This patient decidedly prefers the suprapubic method.

B. B., aged 54 years, a big stout man, said he had suffered more or less pain in the right hip and side for four years; now has pain at tip of penis, and dull heavy pain in perinæum, with a stoppage in the stream from time to time. A few days before admission a surgeon had detected a stone in the bladder; but there was great spasm at the neck of the bladder. He was admitted on Sept. 21, and three days later a calculus was detected on sounding; but the parts were so irritable that patient was given hot baths daily and kept in bed for a fortnight.

The patient had a very deep perinæum and an enlarged prostate, so much so, that the back of

the prostate could scarcely be reached by the tip of the finger.

On Oct. 10, suprapubic lithotomy was done, the arrangements being similar to the case of A. A. Great difficulty was found in suturing the bladder, the wound being  $2\frac{1}{2}$  inches deep; however, seven catgut sutures were put into the bladder wall with difficulty; four silver sutures being used to unite the muscles and skin, with a small drainage tube superficially. No catheter was used throughout. Patient passed water naturally that night.

11th. He complained of flatulence and was very restless.

15th. All silver sutures removed; slight gaping at lower end of wound. Was allowed to sit up in bed.

17th. Patient has been very restless and strained a good deal, which has caused the bladder to give way slightly, and urine is passing above.

Oct. 23. Nearly all passing naturally, only a little from wound.

Oct. 28. All urine has been passing per urethram for the last twenty-four hours.

Weight of stone 5 drachms 27 grs.

C. C., aged 32, a spare man evidently very ill, was admitted on October 24. Patient said his symptoms first began six years ago; three years back lithotripsy was done, but patient was not much relieved; however, he was enabled to keep at his work. About two months ago he placed himself under treatment again. The stone was crushed, and some large portions removed; the operation was repeated, and more debris removed. Since then he has had constant pain and micturition is very frequent. On sounding, several portions of debris were detected, one portion being encysted in the prostate.

Under these circumstances lateral lithotomy was done on October 31. A large irregular calculus, as well as debris, was removed with some difficulty, it being necessary to incise the right lobe also. There was free oozing of blood, which was controlled by a petticoat plug. Weight of stone 6 drachms 44 grs. The patient began to improve from the time of operation, but the wound was a long time healing. It was not until Dec. 15 that the greater quantity of urine passed per urethram, and the wound was not entirely closed until Christmas.

D. D., aged 48. Patient has complained of bladder trouble for three years. If he attempts to pass water upright the stream stops suddenly, and then the urine dribbles away; but he can pass it easily when lying in bed. On sounding, a small stone was detected.

Nov. 21. The stone, weighing about 1 drachm was crushed to a very fine powder, and the debris washed out by Bigelow's evacuator. Patient emptied his bladder with very little pain the same evening; some fine sand, but very little being discharged in the urine.

Nov. 25. Patient feels so well that he wants to get up, but was not allowed to until the eighth day; his temperature throughout having been normal. Discharged Dec. 5.

These four cases are interesting for several points. Firstly, I have learnt that the best guide for distending the bladder is to induce the patient to hold his water as long as he possibly can, and then measure the quantity passed. Of course, in some very irritable bladders this is impossible; but it is the best means of preventing the risk of over-distension. The fact that no catheter was necessary in two such aged men is encouraging. The great depth of the perinæum and the enlarged prostate in B. B. would have presented great difficulties by any other method, though troublesome enough by the suprapubic. The debris and the fragment lodged in the prostate decided me in case C. O., whilst case D. D. was an instance of an easy litholapaxy, there being no enlargement of the prostate, with a rapid convalescence, viz., eight days.

Darlinghurst, Sydney, February 26.

#### A CASE OF SUPRA-PUBIC LITHOTOMY.

By P. T. THANE, L.R.C.P., LOND., M.R.C.S.,  
ENG., OF YASS, NEW SOUTH WALES.

JOHN O—, a dark and fairly well-nourished young man, 20 years of age, was first seen on January 15, 1889, complaining of great weakness and loss of appetite. His family history was good, save that his father died at the age of 60 from a large abscess in the thigh, followed by secondary abscesses (Pyæmia).

He, himself, had always been subject to colds, at times being laid up with them. Has always had a cough, and spat up phlegm, and occasionally blood; otherwise had no serious illness.

His mother stated that he had been losing flesh for some months. During the past week only had he lost his appetite and felt weak, and complained of pains in his head and back. He has slept fairly well, and bowels have been confined. He has had no shivering.

When seen, his temperature was 102 deg. F., and pulse 112. He was complaining of pains in the head, back and limbs, with great muscular weakness: he seemed prostrated. He had an occasional cough, and was expectorating muco-pus.

The tongue was moist, and thickly coated with white fur. Upon examination the pulmonary resonance was found to be normal, and also the breath sounds; but the latter were accompanied over both backs by occasional bronchial râles. The heart sounds and cardiac area were normal.

The abdomen was retracted; there was no tenderness or spots, and the liver and splenic dullness were normal. Tâche cerebrale was extremely well marked.

The next day he was admitted under my care into the Yass District Hospital.

With rest in bed, liquid diet, and aperients as required, he materially improved, the tongue cleaning, the temperature coming down to—and keeping at—normal, and the pulse rate being from 70 to 80. His pains passed away, and he slept well.

Upon examining his urine a day or two after admission, I found it contained a considerable quantity of muco-pus; it had an offensive smell, and phosphates were in abundance. There was no trace of blood in it, nor had he at any time ever noticed blood in it. On January 20 his bladder was sounded, and a large calculus was at once struck; it appeared to be over one-inch in length. His bladder was daily irrigated with warm boracic lotion.

He afterwards stated that on May 24 last, he passed a piece of a stalk of a thistle, about 1½ in. long, and the size of a small quill into his urethra, and that he felt it work itself into his bladder; he could not withdraw it, but some of it afterwards came out with his urine. He did this from foolishness, and not from any feeling of irritation about the penis.

Jan. 27, T. 97, P. 80. Operation at 10-45 a.m. The bladder was washed out with warm boracic lotion, and chloroform administered. The bladder was then injected with about 10oz. of warm boracic lotion, and the root of penis tied with india-rubber catheter. A medium-sized Barnes' bag was passed into the rectum without any difficulty, and distended with about 4oz. of the boracic lotion. The pubes had been previously shaved, and cleansed with turpentine and carbolic lotion.

An incision nearly 8 in. long was made in the middle line, well down on to the pubes, and continued through the rectus, until the bladder was exposed. A loop of stout silk was passed through the bladder wall on each side of the middle line, an incision 1 in. in length was made into the bladder in the middle line, the fluid rapidly escaped, and, on passing the forefinger into the bladder, a number of large calculi were felt, lying loosely at the bottom.

These, five in number, were removed with small lithotomy forceps and the finger. They were smooth faceted stones, and evidently phosphatic. Before opening the bladder one small artery required a catgut ligature.

The bladder wound was carefully closed with catgut sutures, seven being put in but not through the mucus membrane. A small drainage tube was inserted in the only angle of the abdominal wound only; five deep hemp sutures and four superficial catgut sutures put into the abdominal wound. Iodoform was dusted over the wound, and a dressing of boracic lint, sal alembroth wool, and oakum used.

A No. 10 India-rubber catheter was left in the urethra.

The peritoneum was not seen during the operation.

The weights of the calculi were 5dr. 38gr., 4dr., 3dr., 2dr. 20gr., and 2dr. 15gr.; in all 17dr. 18gr., or 1,083gr. Upon section, they contained a pul-taceous and offensive centre. In the largest stone was a greenish foreign body about the size of a pea, and over this the layers of phosphates were deposited.

3 p.m.—T. 103, P. 126. Has shivered a little; about 10oz. blood-stained urine drained off by catheter. Inj. Morph. hypoderm. gr.  $\frac{1}{4}$ . 7 p.m., T. 102.6, P. 180. 10oz. more urine, containing less blood. 11 p.m., T. 103.8, P. 128.

28th.—T. 98.8, P. 120, R. 32. Bowels open, loose yellow motion. Over 50oz. of urine passed by catheter, the last quite clear, free from blood, and no smell. Superficial dressings changed, only some oozing of blood on the same. Catheter taken out, washed and replaced. No cough, but râles in chest audible.

E.T. 101, P. 140, R. 32. 36oz. urine passed, same as in morning. B. moved three times; some mucus and blood with each motion. Has some cough with slight mucus-purulent expectoration. Resonance at left base impaired, and breath sounds here inclined to be tubular. Complaints of flatulency. During the day tried to leave the catheter out, and pass it every three hours, but, owing to continual desire to pass water, the catheter had to be left in.

29th.—T. 97, P. 108, R. 20. Slept fairly well, passed two motions with mucus and streaks of blood. 40oz. urine passed, containing a little shreddy matter. Tongue—very white fur, inclined to be dry. Cough very troublesome. Brandy 4oz. daily.

E.T. 100, P. 120, R. 24. B. open three times, as before. Urine 30oz. Dulness more marked at left base; bronchitic sounds very abundant at both bases; less cough; expectoration freer and easier.

30th.—T. 97.2, P. 112, R. 20. B. moved six times, some of these consisted of nothing but blood and mucus. Urine 35 oz. He complains of belly-ache. Wound dressed for the first time, apparently complete union by first intention, save where tube was left in. No redness, swelling, or tenderness about wound. No stitches removed, drainage tube left out. Catheter to be left out one hour night and morning.

E.T. 99, P. 108, R. 26. Urine 30oz. Three actions of the bowels, same as before; complains of great pain whilst passing motion. Not taking his nourishment well.

31st.—T. 99, P. 108, R. 24. Passed a very restless night, being on the bed-pan nearly all night, passing blood and mucus about seven times, but more blood than before. There is some watery fluid, slightly blood-stained, and almost free from odour, running occasionally from the rectum. Face flushed, tongue dry, thin brownish fur in centre. About 35oz. urine.

E.T. 100.2, P. 108, R. 24, urine 10oz, and about another 10oz. were estimated to be passed into the bed-pan whilst using it. Still passing almost continuously the same from bowel, but getting more purulent. Passed no fæces since yesterday afternoon. Cough very easy.

Feb. 1.—T. 97. P. 90. Passed about eight times blood and pus as before. Slept a little. Urine about 18oz., more high-coloured. Wound dressed, all stitches removed, perfect union, some very slight redness around stitches, no swelling or tenderness at all about pubic region. In re-dressing, the sal alembroth wool was omitted. Catheter to be passed every two hours. E.T. 99, P. 100, urine 20oz. Some five actions of the bowels since morning, but smaller in quantity.

2nd.—T. 98, P. 86. Urine 20oz., contains mucus, considerable quantity of phosphates, no albumen, is high-coloured. Thrice has passed blood and pus from bowel, and once a costive motion with some mucus, but no blood. No blood or pus running from rectum now. Tongue moist, and cleaning. E.T. 99.6, P. 104. Twice passed motions, last free and soft, and but slight traces of blood and pus. Has also twice passed some blood and pus. Urine 13oz.

3rd.—T. 97.8, P. 92. Two slight actions of blood and pus. Feels much better. Upon attempting to pass water himself this morning for the first time (8th day) urine came through the upper part of the wound, which opened up for about  $\frac{1}{2}$  in. Catheter to be left out, and patient to lie on alternate sides. Dressings of boracic acid lint—to be changed every four hours if required.

E.T. 99.8, P. 100. Urine running freely through opening. Three slight actions of blood and pus, with scanty motions. Dulness and tubular breath-

ing at left base continues, moist sounds clearing up, but occasional sonorous rhonchi to be heard over back.

4th.—T. 98., P. 90. Two motions passed with slight traces of blood and pus. During the night some blood came through the abdominal wound with the urine, and he passed at 5 a.m. about 1oz. of dark clotted blood per urethram, and about 2oz. of blood and urine at 9 a.m. Is taking nourishment well.

E.T. 98.8, P. 96. Bowels opened once, and twice passed a little blood and pus. Urine came through opening three times, and at the same time passed a little urine per urethram.

5th.—T. 97.4, P. 80. Three motions passed with slight traces of pus. From this time the bowels kept freely open without medicine, and by the 8th all traces of blood and pus had disappeared. Passed per urethram 1oz. of clear urine, and the rest through the wound. Eating and sleeping well.

E.T. 98.4., P. 80. Passed over 8oz. of urine at once, per urethram this evening.

6th.—Passed 10oz. urine per urethram this morning, 4oz. at one time; some deposit of pus and mucus, free from blood. Very little urine on dressing.

7th.—Dressings changed after being on 24 hours, lint only damp, not soaked through. Wound healthy, and closing rapidly.

8th.—During night passed 25oz. urine per urethram. Dressings changed; no escape of urine whatever through the abdominal wound during last 24 hours, and from this date all urine was passed naturally.

14th.—Marked general improvement in health. Wound—which is size of a sixpenny-piece—was quite healed by the 20th.

17th.—Dulness quite cleared up over left base, breath sounds normal, but occasional rhonchus to be heard over each base on deep inspiration. To get up. Urine faintly acid, no albumen, marked deposit of mucus and phosphates.

Went home on March 11th generally improved. Still complains of slight smarting after passing water, and urine the same as last note, save that the mucus and phosphates are considerably less. He does not require to get up in the night to pass water.

Remarks.—When this patient was first seen, I thought that possibly the diagnosis was enteric fever, and I came to that decision by a process of exclusion; not a single hint was given to point to the bladder as being at fault, and it was not until the urine was examined that a correct diagnosis was made.

Having no personal experience of litholapaxy, nor suitable instruments if I had wished to attempt it, my choice lay between perineal and supra-pubic lithotomy.

The former I had seen performed several times, but never the latter, and yet this latter has always commended itself to my fancy as being the clearer and safer operation. Dr. Twynam, in his article on this operation in the *A. M. G.* for Oct., 1888, has ably set forth many of the advantages the supra-pubic has over the perineal, and, to my mind, one of the chief arguments in favour of the former is, that it is an operation any practitioner can perform, and with as much hope of success as the specialist.

Perineal lithotomy is certainly a brilliant operation when skilfully performed, but yet, I believe, many medical men would hesitate some time before undertaking it, and probably would prefer passing the case on to one who has had some special experience of it.

With regard to the operation I am indebted to Dr. Twynam's paper, before mentioned, for several useful hints; a loop of silk on each side of the middle line in the bladder, as he suggests, simplifies matters wonderfully, and enables the sutures to be introduced with great ease. I was surprised to find how high the position of the bladder was, the whole of it appearing to be above the level of the symphysis pubis. It will be noticed that I sutured the bladder wound completely, as I had determined to keep a catheter in the bladder after the operation. This catheter I could not dispense with until the wound re-opened, when, of course, there was no further necessity for it, and naturally it gave rise to considerable urethritis, and to this latter I attributed the late hæmorrhage observed on the ninth day.

The re-opening of the wound with escape of urine on the eighth day was due, I believe, to the strain upon the wound from the severe coughing, and so preventing sound union, so that this union gave way on the first attempt to pass water naturally.

That this opening was but small is evident from the fact that in less than three days urine ceased to come through it.

With regard to the bronchitis, this was evidently induced by the chloroform (fortunately ether was not used); he was subject to this, and on admission to the hospital had some bronchial catarrh, which had apparently cleared up before the operation.

And now I wish to draw attention to one most unusual complication—the enteritis. It will be noticed that the bowels were moved the morning following the operation, although they were well cleared out just previous to it, and a hypodermic

injection of morphia was administered after it, and, on the evening of that day, blood and mucus appeared with the motions, and from then he went from bad to worse. For four days I was at a loss to account for this; rupture of the bowel at the time of operation, leading to ulceration, &c., suggested itself, yet I could not believe that this was the cause, as there was not the slightest difficulty in introducing the bag, and only 4oz. of fluid were used in distending it. Pelvic cellulitis from the operation also occurred to me, but the condition of the wound itself, and not the slightest sign of tenderness or fulness about the pubes, seemed to negative this. When dressing the wound for the second time, the mercurial wool as a source for causing this irritation occurred to me, and it was discontinued. Within 24 hours from this, the improvement was most marked and rapid, and continued, so that in less than one week, all signs of this had disappeared.

To those watching the case, there seemed not a shadow of doubt that the wool was the cause of the enteritis. Binders were used to keep the dressings in place, and tapes passed between the legs from the back to the front to keep them from slipping up, and I had carefully packed the mercurial wool between the thighs and around the scrotum, to prevent the tapes from cutting; consequently every little move on the part of the patient was causing the wool to be rubbed in to a most susceptible part, as undoubtedly there the skin is thin and always more or less moist. That the amount of mercury absorbed must have been small there can be no doubt, and it did not cause any signs of salivation, but appeared to act only on the mucus membrane, which was nearest to the point of absorption.

Messrs. Elliott Bros., Limited, of Sydney, who supplied the wool, can give me no information as to its strength, but, from analyses I made myself, I estimate the amount of the perchloride of mercury to be 2.48grs. to the ounce weight of wool, and, according to the Extra Pharmacopœia, this corresponds fairly with the usual strength of the wool.

To my mind this case certainly speaks strongly in favour of the high operation; in spite of a severe attack of bronchitis, giving rise to some broncho-pneumonia, severe enteritis, urethritis, and even reopening of the wound, he was perfectly recovered and able to get up on the 22nd day; also it shows what a good constitution my patient must have.

In conclusion my thanks are due to Dr. Hoets, who assisted me in the operation, and during my absence from town took charge of my patient, and to my brother who administered the anæsthetic.  
April, 1889.

### THREE CASES OF SUPRA-PUBIC LITHOTOMY.

UNDER THE CARE OF B. POULTON, M.D.,  
M.R.C.S. ENG., SURGEON, ADELAIDE HOSPITAL.

(Reported by J. H. Evans, M.B., &c., House Surgeon.)

I.—S. J. F., æt. 39, M., bricklayer, Parkside, admitted August 8th, 1888, complaining of slight pains in stomach and back for last three years, but during last three months pain has been very severe at times, especially in side, back and pit of stomach, nearly doubling him up and usually followed by vomiting. Had typhoid fever three years ago last February, and has had periodical attacks of vomiting since then, one attack lasting, off and on, for six weeks.

Bladder examined with sound, on admission, and a calculus felt.

Urine very highly coloured, alkaline, Sp. G. 1.026. No albumen or sugar. Copious deposit on standing. Under microscope triple phosphates and a few corpuscles seen.

August 11th.—Bladder to be washed out twice a day with a solution of Boric acid.

12th.—Considerable deposit of pus in urine.

15th.—Patient etherised. Dr. Poulton performed the operation of Supra-Pubic Lithotomy, and removed a stone (Phosphatic) weighing 70 grains. Bladder washed out with Boracic solution; a piece of tubing left in bladder, through wound, and another smaller piece left in external wound, which was stitched up and dressed with Iodoform gauze and salicylic wool. The urine was drained away from the bladder by means of a catheter passed along the urethra.

16th.—Had  $\frac{1}{2}$  gr. morphia suppository last night, about midnight, as he was in pain and could not sleep. Towards morning slept. Feels no pain this morning, excepting that his back feels tender from lying in bed. Complaining of thirst in the night. Very little urine passing through the wound; nearly all comes by the catheter through the urethra. The urine is blood-stained.

4 p.m.—All the urine for the last two hours has come through the in catheter the urethra.

17th.—Urine passing through both tubes freely; wound quite dry. No pain; no discomfort, except from lying in bed.

Temp. 100 N. Normal M.

18th.—Both tubes blocked with mucus and phosphates. Tube through incision withdrawn

from bladder and left in the wound, external to the bladder. B. antipyrin, gr. v., aqua ad. ʒi. t.d.s.

Dressed with carbolized linseed oil.

19th.—Urine still phosphatic. Adde ad. Hst. antipyrin gr. x.

20th.—Urine very phosphatic and all coming through the wound, which is looking well.

21st.—Tube through wound removed; all the sutures that were inserted at the time of the operation, except one, removed, and edges brought together with plaster (Mead's).

22nd.—Slight oozing through wound.

23rd.—Urine still strongly alkaline. Very little passing through the wound. Antipyrin stopped. Ammon. benzoate gr. x, glycerine ʒss., aq. ad. ʒi. t.d.s.

24th.—Urine not passing well through the catheter; nearly all coming through the wound. Bladder washed out with boracic solution.

27th.—Urine alkaline, phosphatic. Bowels confined—opened freely by enema.

28th.—Wound nearly healed; slight discharge of pus; appetite good. Benzoate of ammonia stopped. Bladder to be washed out with solution of nitric acid aq. ad. ʒi.

29th.—Urine faintly alkaline; slight discharge of pus from wound. On passing catheter to wash out bladder, there was a considerable discharge of pus. Trace of albumen in urine.

31st.—Urine faintly acid; very little pus from wound, some in urine.

Sept. 1st.—Urine acid, and contains a little mucus.

5th.—Urine faintly acid; contains mucus.

7th.—Great deal of pus passed at end of micturition.

11th.—There is still a fistulous opening leading down to the bladder, through which a little urine is discharged.

18th.—Fistula has quite closed; urine acid; contains a lot of deposit still.

Rpt. Hst. Am. Benz.

Discharged.

27th.—To go on with medicine for another week.

Nov. 5th.—Water freely alkaline; much mucus, with some pus and blood in it. Trace of albumen. Re-admitted.

Complaining of pain during the act of micturition, especially just after the act, when it is very severe. Passes his water about every two hours during the day, and about three times in the night. Bladder washed out with a dilute solution of nitric acid. Hst. Am. Benzoate ʒi. t.d.s.

10th.—Bladder examined with sound; small calculus discovered.

14th.—Dr. Poulton crushed the stone with a Lithotrite, and washed the bladder out well. The fragments of calculus weighed 20 grains, together with some grit that was passed afterwards.

15th.—Water contains mucus, and is blood-stained. Complains of a little soreness about the passage. Some grit in urine.

16th.—No pain at all; no grit. Urine contains mucus and pus.

21st.—Patient passed a fragment of stone.

24th.—No more symptoms. Patient discharged apparently well—did not take any medicine with him.

N.B.—The weight of 20 grains includes all the fragments that came from the bladder, both at the operation and subsequently.

March 5th.—Patient has not presented himself at the hospital since he went out on Nov. 24th.

Case II.—Lawrence R., æt. 26, S. miner; residence, Albert gold-field; born in Adelaide; admitted June 29th, 1888.

Symptoms on admission: Severe pain at neck of bladder after passing his water, or when riding in any vehicle. When he lies on his back he has pain also, but this is referred to his groin. Sometimes passes a "thick slimy film" with his water. Has had symptoms for the last nine years, but they have become much more severe of late. Examined with a sound; large stone felt immediately at neck of bladder. Urine turbid, alkaline, containing mucus and phosphates. No albumen.

July 2nd.—Bladder to be washed out with lot. boracis.

4th.—Patient etherised. Bladder and rectum distended. Dr. Poulton cut into the bladder above the pubes and removed a stone weighing 980 grs. Wall of bladder partly stitched up with fine silk and a drainage tube left in. Skin and sub-cutaneous tissues brought together with silk and horsehair sutures. Soft catheter tied in penis. Dressed with carbolized linseed oil.

6th.—Patient did not sleep last night, on account of inconvenience caused by the catheter. Urine contains a slight amount of mucus. Bladder washed out.

9th.—Bladder washed out. Very little mucus in urine.

10th.—All stitches removed from integument; edges of wound brought together with plaster. Drainage tube removed from supra-pubic incision.

11th.—Dressings and bed-clothes soaked with urine. Very little urine has passed by the catheter. Plaster loose; re-applied.

12th.—Water passed through catheter freely during the night; not much passed through wound. Plaster re-applied.



13th.—Water coming mostly through wound.  
 14th.—Catheter slipped out of bladder; most of urine coming through wound. Two hare-lip pins introduced through the edges of the wound at the upper part, and these approximated. Catheter re-inserted.

15th.—Very little water coming through wound.

16th.—Dressing quite dry; all the urine coming through the catheter. Wound very small. Catheter rather uncomfortable.

17th.—Slight trickling of urine through wound. Catheter removed, and patient to pass it himself about every two hours. Hare-lip pins removed and three silk sutures put in.

18th.—Water came through wound freely last night while patient slept. Catheter to be tied in bladder again.

19th.—Urine passed through catheter freely.

20th.—Silk sutures removed. Adhesive plaster applied. Slight escape of urine through wound.

22nd.—No escape of urine through wound since 21st., which has almost closed.

27th.—No escape of urine through wound since 21st.

31st.—Wound closed. Catheter removed.

Aug. 18th.—Urine Sp. Gr. 1.022. Slightly acid. Considerable deposit of pus.

14th.—℞ Hst. Cinchon. acid ʒi. t.d.s.

15th.—Bladder washed out with lot. ac. nit. daily.

23rd.—Urine faintly alkaline, and contains a good deal of pus. Medicine changed to following: ℞ Ammon. benzoate gr. x, glycerine, ʒss., aq. ad. ʒi., t.d.s.

24th.—Hardly any pus when bladder washed out.

27th.—Urine acid; contains pus.

28th.—Discharged.

A month afterwards patient was shown before the Medical Society, being then quite well. After this he went up country, and has not been heard of since.

Case III.—W. W., æt. 7; admitted Nov. 24th. Mother states that the child has had trouble with his water for the last five years. Complaints of pain when making water. On examination stone felt in bladder. Urine contains mucus.

Dec. 1st.—Patient etherised. Bladder distended with boracic lotion. Dr. Poulton cut into the bladder above the pubes, and extracted a small stone, weighing 12 grains, (uric acid) with his finger. External wound sutured. Small tube left in vesical wound. Catheter left in bladder.

2nd.—Hardly any urine has escaped through the wound, which looks very well, the skin edges

having united for the most part. Water runs away freely through the catheter, which was removed, cleansed and returned.

3rd.—No escape of urine through wound. Tube removed. Patient feeling very comfortable.

5th.—All sutures removed.

8th.—No escape of urine through wound, which has nearly healed. Catheter left out of bladder.

12th.—Urine clear; no escape of it through wound, which has quite healed. No trouble at all with his bladder.

18th.—Urine contains a little mucus, and is faintly alkaline. To take ʒii. t.d.s. of Hst. Am. Benzoate.

23rd.—Discharged cured.

REMARKS BY DR. POULTON.—This operation is facilitated by cutting into the bladder wall, on to the point of a sound or catheter; after the insertion of a silk thread to keep the incision well up, otherwise there may be some difficulty in finding the opening in the collapsed viscus. The ease with which one is able to explore the whole area of the bladder is not the least recommendation of the operation.

In case I. the calculus removed was a long, curved mass, but contained no foreign body or mucus. Its shape was very suggestive of the end of a broken catheter.

The small size of the stone in case III. is remarkable, considering the history of five years bladder trouble.

## NEPHRO-LITHOTOMY.

By ERNEST HUMPHRY, L.R.C.P. LOND.,  
 M.R.C.S.E., OF TOWNSVILLE, QUEENSLAND.

Mrs. W., aged 41. Six children. Three died in infancy.

Dec. 17. In the evening I was called to Mrs. W. She complained of severe pains in the left side, just under the last rib, and shooting down to the vulva. She had vomited once or twice and was passing water very frequently, but very little at a time. Temperature 101.6, perspiring freely. The only way she could get any relief was by holding the bed-post above her head and straining with all her strength. For the last four years she had suffered from pain in the left side and had three previous attacks similar to this, with a week's

interval, the first one four weeks ago. I examined her thoroughly, but found no physical sign of disease beyond a very tender place under the twelfth rib. No swelling or tenderness on deep pressure of the abdomen. She had never noticed anything unnatural with her urine.

URINE—1020, acid, trace of albumen.

Dec. 18. Out of bed and at work. Felt quite well again except for a feeling of exhaustion. Pain and tenderness gone. Temperature natural.

Dec. 31. At this date I saw her again; she had had another attack and was now recovering from the second since I had seen her, with a week's interval between the two. I examined the urine again, this time it was very different—1015, neutral, albumen  $\frac{1}{2}$ , and on allowing it to stand deposited nearly half a volume of pus: this was proved by the microscope.

Feb. 5. She has now had twelve attacks, coming regularly every Monday or Tuesday; they always last three or four hours, and have always been accompanied by vomiting, frequent micturition, and high temperature; also a tenderness under the twelfth rib, which disappeared directly the attack was over. There has never been any swelling or tenderness in the abdomen. The day before an attack the urine has a much paler colour and lower specific gravity. For the first few hours after an attack it was loaded with pus and on the second day the pus was in smaller quantity. For the rest of the week there was scarcely a trace of pus or albumen and the specific gravity varied from 1020 to 1025. It always took her two days to recover from an attack, but for the rest of the week she enjoyed perfect health.

I had some time previously informed her of my suspicion of a stone in the kidney, but advised her to wait and see if it would come down the ureter, but as the attacks continued and she suffered such severe pain I easily persuaded her to let me explore the kidney.

Feb. 11. OPERATION. Dr. Van Someren administered chloroform, and Dr. Clatworthy assisted me. She was placed on the right side with a pillow under the right lumbar region to separate the crest of the left ilium from the last rib as much as possible. I made an incision three and a half inches long, parallel to and half an inch below the last rib, commencing at the border of the erector spinæ muscle. The integuments were divided on a director down to the lower border of the kidney, which was easily made out moving up and down with the respiration and lying in the surrounding loose fat. I then introduced three fingers and easily made my way to the pelvis of the kidney and there felt a stone about the size of a bean blocking up the entrance of the ureter;

but it slipped back into the pelvis which was much dilated, and I had the greatest difficulty in finding it again. Three times I lost it, but the fourth time, having fixed it with my left finger and thumb and dragged it to the edge of the wound, I opened the pelvis with scissors and the stone easily slipped out. Hæmorrhage during the operation was very slight; not a vessel having to be secured. A drainage tube was left in the wound, and three silver sutures put in. Dressed with carbolic oil. She bore the operation, which lasted half-an-hour, very well.

9 p.m. Suffering much pain; the urine drawn off with a catheter; contains some pus, but no blood.

Temp. 98.4; pulse 72. A quarter of a grain of morphine administered hypodermically.

Feb. 12, 6 a.m. Passed a quiet night; some pain at intervals.

Temp. 98.4; pulse 72. Urine drawn off—1020, acid, blood-stained, no pus. Wound looks well.

6 p.m. Vomited once or twice during the day. Taking iced milk and soda-water. Temp. 99.8; pulse 88.

13. 6 a.m. Passed a good night; pain quite gone; vomiting ceased. Temp. 98.8; pulse 72. Urine 1024, acid. Trace of albumen.

6 p.m. Slight pain in abdomen from wind; enema administered without result with exception of wind. Passed urine naturally for first time.

14. Slept well; wound looks healthy; less discharge. Bowels open naturally. Temp. 98.4; pulse 72.

19. Doing exceedingly well; drainage tube taken out; urine 1020, acid. Slight deposit of pus on standing.

20. Out of bed to-day for the first time to sit in a chair; says she feels perfectly well.

28. Is quite well now; wound all but healed.

March 4. It is three weeks to-day since the operation, and she has done a hard day's washing. Wound healed. Urine 1015, acid; no albumen.

REMARKS. The operation was very simple, and would have been over in a quarter of an hour if I had secured the stone properly when I first felt it. The stone which is composed of uric acid and about the size of a bean weighs thirty-two grains.

I never had any cause for anxiety; the patient was out of bed on the ninth day, and said she had not been so free from pain for four years. She did a long day's washing at three weeks from the date of the operation.

No swelling or tenderness was ever felt in the abdomen, and the tenderness under the last rib only existed during the attacks of pain.

I never discovered any blood in the urine.

## NOTES OF FOUR CASES OF CLEFT PALATE (WITH EXHIBITION OF CASE).

READ BEFORE THE QUEENSLAND MEDICAL SOCIETY.

By J. LOCKHART GIBSON, M.D., FORMERLY  
SENIOR DEMONSTRATOR OF PHYSIOLOGY,  
EDINBURGH UNIVERSITY.

I THINK a few notes on some cases of Cleft Palate that I have had may prove interesting, and I wish at the same time to show a fairly typical case of successful result after the operation.

The case I am to show you is that of a six-year-old child who suffered until the age of three years from a complete median cleft of the soft palate, and cleft of the hard palate just up to, but not including the alveolus. The child could not talk at all. As you will see, I succeeded in closing the cleft completely, and I am pleased to say in one operation, as every stitch held. Her voice, though it might be much better, is fairly good, and will, I think, with the careful teaching she is now getting, improve very much and not be a great drawback. You can see the marks of the stitches from behind the alveolus to the uvula. The uvula is short, as it was not at any time very long, and it shrank a little after the wound healed. An interesting point about this case, and one which shows how necessary the operation was, is that as she grew older her parents noticed that she was deafer than their other children, and required to be spoken to very loudly, also that the deafness was increasing. Upon examination I found both Membrana Tympani were much indrawn, that the Eustachian tubes were much narrowed, and that her hearing for my watch (which is heard by a normal ear at 3 yards), was for the right ear one inch; for the left ear two inches. Under treatment her hearing has improved until she hears my watch with right ear at 23 inches; with left ear at 29 inches, and improvement is still continuing. Had the cleft in her palate not been closed, I could not have politized her with almost any advantage, and could only have treated her ears by means of the Eustachian catheter, which, I am convinced, would have required her to be put under chloroform each time, as she is extremely timid. There would, in fact, have been a very great risk, had the operation not been performed, of the child's growing up both deaf and dumb.

My second case was that of a boy of six years, who had suffered from complete unilateral cleft of the hard and soft palate, including the alveolus,

and accompanied by a bad hare-lip. The hare-lip had been operated upon in infancy. He suffered when I first saw him from purulent catarrh of the whole naso-pharynx, and had a large mass of adenoid tissue (hypertrophied pharyngeal tonsil) growing from the pharyngeal roof and posterior naso-pharyngeal wall. Before operating, I removed this growth under cocaine, and endeavoured to cure the purulent naso-pharyngitis. In this last I succeeded pretty well, though I should probably have had a more completely successful result with the cleft palate had I waited a few weeks longer. I was perhaps a little precipitate in operating, owing to the child and his mother having to stay in Brisbane all the time, and to the delay causing some inconvenience. I endeavoured to close the whole cleft at once, and for the first few days thought I had succeeded, but he was dreadfully sick and upset for days after the chloroform, and the purulent catarrh returned somewhat, which together with the vomiting caused almost all the soft palate stitches to give. Those in the hard palate all held, and it could not have done better. And although the stitches in the soft palate gave, the two sides became very closely approximated, so much so that they acted almost as a complete velum. The child was rather delicate, which, combined with other circumstances, prevented my making another attempt to close the soft palate for quite a year. In this second operation I was unsuccessful, as only one of the stitches held. I have not had another attempt, as his mother is much afraid of chloroform, which certainly has not a good effect upon the child. I am not sure that I shall be allowed to complete the operation. The result, however, may be looked upon as successful, as the hard palate is completely closed from alveolus to fauces, and as his voice is really not at all bad, and much better than previously. The operation has also had a good effect upon the boy, who now feels more like other boys, and is less retiring than he used to be. He used, in fact, to be somewhat ashamed of himself. This moral effect of the operation his mother mentioned very specially to me, as it pleased her much. It is an effect that I have also noticed in my other cases.

The third case was that of a little girl, aged 6 years, with complete cleft of the soft palate. Her speech was very bad, almost unintelligible. The result in her case was quite successful, though the stitches in the uvula gave after the first operation. I re-pared and re-stitched this part about six months after, with successful result. The effect upon the speech of this child has been very marked, and, if sufficient trouble be taken with her, she will speak almost without defect. Did

she not live 12 miles from town I should have shown her to you this evening. My fourth case resembles number two in being a complete unilateral cleft right through the alveolus, accompanied by hare-lip, which latter had been operated upon in infancy. It is that of a boy, aged two years, very unmanageable, and with a most uncomfortable habit of sucking the roof of his mouth with his tongue. He suffered from a constant slight cold, which did not, however, amount to purulent naso-pharyngitis. I hesitated much as to whether it would be better to operate while the child was young, so that the effect upon his speech might be best, or to wait until he had more sense, and could be kept quiet and be made to understand that he must not suck the wound with his tongue. I decided to give him the chance of early operation, and decided, also, to do only the hard palate at first, as I was convinced that his tongue would never allow the cleft of the soft to close up. This child I operated upon only three weeks ago, and the result has been, considering all things, satisfactory. I introduced seven stitches, five of which held, the posterior two giving. The united part looks firm and well. The child abstained from crying in a quite unexpected manner; but, as I feared, he used his tongue freely on his palate, to which I attribute the loss of the last two stitches. So satisfied, however, am I with the result of this operation, that I purpose completing it at an early date.

The most important points to attend to in cleft-palate operations are: Attention to the health of the patient; the curing of any purulent catarrh of the naso-pharynx; the education of the patient, *i.e.*, teaching the child to remain silent, and to refrain from sucking with his tongue. A child of between two and three years, if sufficiently well brought up, can be taught all that is necessary. For instruments, I have used only Tenotomy knives, sometimes a double-edged knife, catch forceps, raspatory, handled needles, and silkworm-gut. The gag I have always used, and of which I cannot speak too highly, is Whitehead's. The silkworm-gut I can specially recommend as being better than either horse-hair or silver-wire. It possesses the good qualities of both, and the disadvantages of neither.

Small sponges on Spencer Well's forceps I prefer to those tied on sticks, and I find it a great advantage to wash them in solution of soda during the operation. For operating I have invariably adopted the position of "Rose," with the head hanging over the edge of the table, so that the blood neither gets into the windpipe nor stomach, but runs down into the naso-pharynx, and this position also keeps the epiglottis from falling back on the arytenoids. I am convinced that nobody who

has ever employed this position for operating, or even seen it used, would ever resort to the practice adopted by some well-known surgeons of performing tracheotomy as a preparatory to operating on cleft palate.

The other points to be attended to are careful paring of the edges of the cleft, which I make the first step, and a total absence of all tension in the flaps. Active tension in the case of the soft palate must be avoided by dividing the levator palati, and palato-pharyngeus muscles. There must be absolutely no tension or non-union results, and the thought of blood supply has often to be made secondary to this. It is wonderful how a flap lives with only a narrow bridge of tissue behind and in front, and with sometimes, I believe, the chief trunks of both anterior palatine and incisive arteries cut.

#### A CASE OF QUADRUPLE BIRTH.

BY R. ROBERTSON, F. AND L.F.P.S. GLASGOW,  
&C. &C., OF ADELAIDE, S.A.

MRS. NORRIS, of Goodwood, near Adelaide, S.A., age 34. On the evening of March 28th, 1889, at 6.30 p.m., I was summoned to attend her in confinement. On arrival about 30 minutes later, found the patient in labour, and on examination externally was astonished at the size of the abdomen, which was abnormal. Made an examination "per vaginam" and diagnosed a breech presentation. Child delivered at 7.15, naturally. On re-examination found a second child, presentation as before and delivery effected; in passing the hand over the abdomen noticed that the uterus was still large and pains not entirely suspended. As the patient exhibited symptoms of weakness, passed bandage round the abdomen and administered 31 Liq. Ergoti. On further examination discovered third child, breech presentation, safely delivered; pains still continuing; made another examination and found a fourth child, head presentation. Being high up, turned, brought foot down and delivered safely. The four cords were attached to one placenta, which was removed by passing hand into uterus and retained there until uterine pains were excited, then safely removed. I may say that a large quantity Liq. Amnii escaped with each birth. The children, three females and one male, were fully developed, weighing, on an average, about 7lbs. each. At 8.15 (exactly one hour) the safe delivery of the four children, with placenta, was

accomplished. Patient being very weak, administered 3j Liq. Ergoti, applying cold water cloths to vulva and tightly securing bandage, left patient and babies at 9 p.m., fairly well.

Friday, 9 a.m.—All doing well; 5 p.m., ditto.

Saturday (next day)—9 a.m. Found patient had passed good night, and bowels moved; "after pains" severe; prescribed 20 drops Tinc. Opii and Aq. Chlof., which gave relief. In the evening "all right."

Sunday, 9 a.m.—Restless night, temperature 108°, pulse 120. Prescribed Tinc. Aconite 2½ drops every four hours and pil. opii 1 gr. every four hours to relieve pain and tenderness which extended over uterus. 1 p.m.—Temp. 104°, pulse 140. Consulted Dr. James O'Connell same afternoon, symptoms then present were haggard appearance of countenance, temp. 104°, pulse 140, considerable pain and diarrhoea and tenderness over abdomen; suppression of the lochia. Ordered the following treatment, acid Salicylic gr. xv, Bi-carb. potass gr. x, Syr. Aurantii 3i, aqua to 3i, to be taken every two hours; continued pills every four hours, applied turp. fomentations to abdomen and washed out vagina with weak solution of carbolic acid. 8 p.m.—Temp. 100°, pulse 100, much improved every way, mixture every four hours. Spongiopilin fomentations with Lin. Aconit. and opii, and renewed every six hours.

Monday.—Temp. 99°, pulse 80, had good night. Diarrhoea ceased. 1 p.m.—Progressing, temp. and pulse normal. Children also doing well.

Tuesday.—Symptoms continuing favourable.

Wednesday.—Patient and offspring all well.

Thursday.—Ditto.

Friday.—Ditto, nourishment increased.

Saturday.—Mother very well able to sit up in bed; after which, recovery was rapid.

The case is remarkable, as Mrs. N. had previously given birth on one occasion to twins; and, also, (although recorded in the various works on midwifery, of women having given birth to four and five children at a time, they were generally premature) this woman having, however, in this case, carried the full time, and brought forth perfectly developed offspring.

The circumstances surrounding the parents, they being poor, precluded their giving the full attention to the children, which was necessary. Two died from atrophy or diarrhoea, within a fortnight, the others within a month, from the same cause; but there can be no doubt had favourable conditions been present there is no reason to suppose other than that this quadruple would have reached maturity.

King William-street, Adelaide,  
April 26th, 1889.

## ON THE PATHOLOGY AND CURE OF SNAKEBITE.

BY A. MUELLER M.D. YACKANDANDAH,  
VICTORIA.

### V.

THE latest triumph of strychnine over snake poison occurred at Lilydale, on the 4th ult. It was reported in some of the morning papers as having been effected by Ammonia injections, but the ubiquitous *Herald* reporter ascertained the true facts of the case, which were given in the *Herald* of the 5th. A young man, Luke Dewhurst, was bitten on the hand by a tiger-snake at a farm near Lilydale. He started to walk the distance of eight miles to the latter place after cutting out the bite, but fortunately met a conveyance to take him on. Some further delay was caused by Dr. Dutton being absent when he reached his residence. "When Dr. Dutton arrived, he lanced the hand and injected ammonia, but the poison had taken such an effect on the patient that his case was considered hopeless. However, the Dr. injected strychnine and cocaine, which had a good effect on him. He was kept walking about, and at 11 o'clock last night he was out of danger." Dr. Dutton has kindly informed me, that he injected 15 minims of Liq. strychnine, and one grain of cocaine, and ascribes the arrest of the coma to the latter drug. Never having used cocaine in snakebite, I am not prepared to dispute the correctness of his conclusion, but I know from frequent observation that strychnine invariably dispels snakebite coma besides restoring the power of voluntary muscular action, since its effects are not confined to the anterior columns, but extend over all the motor centres. It is needless to multiply deductive proofs of the correctness of my theory by citing cases out of my own practice. Like those observed by others and cited above, they demonstrate one and all the unfailing efficacy of the antidote, and the strict correspondence between the quantity required of it, and the amount of snake poison absorbed. Cases may occur in which the quantity of strychnine required to subdue the symptoms and to be injected within a few hours, may amount to a poisonous dose, in cobra bite possibly to a grain or more, whilst in Australia it is seldom above half-a-grain. But to urge this as a reason against the use of it is—to say the least of it—puerile, since the two poisons neutralize each other, the strychnine not causing muscular spasms, until it has completely disposed of the snake poison, and the latter being apt to reassert itself in the presence of an insufficient supply of the antidote. The risk of strychnine poisoning

therefore, commences only with a more than sufficient supply of it, and no medical man worthy of the name would ever dream of incurring this risk by continuing the use of the antidote after it has done its work. To inject in urgent cases one-sixth, in milder ones one-twelfth of a grain every half-hour, until the effects of the snake poison are completely removed, is perfectly safe practise which none who follow it will have cause to regret. A very small dose will then suffice to produce slight muscular spasms, and to make sure, doubly sure, a glass or two of wine or of spirits and water, will show by their exhilarating effect that all danger is past. I cannot conclude my remarks on this important subject, without making once more an earnest appeal to the medical profession and the public for publication of all cases of snakebite treated by my method, for it is only thus that the vexed question of snake poisoning can be thoroughly solved and finally disposed of. The code of medical ethics might with advantage be enlarged by a rule placing, *sub pena*, the withholding of any information calculated to further the common weal of science. If some such rule were now in force, the proofs of the efficacy of strychnine in snakebite would be even more numerous than they are already. But for the *Herald* the Lilydale case would, in all probability, have been credited to ammonia. Others, even more valuable to science, have been lost altogether. Thus, *e.g.*, early last summer—in one of the suburbs—an imported cobra bit a boy, deputed to give it water, on the hand. He was taken to one of the hospitals and discharged cured on the following day. The only information vouchsafed to the public was that of “a strong antidote” having been used; as all other alleged antidotes have been found useless against cobra-bite, the assumption that the “strong antidote” was strychnine amounts almost to a certainty, for—if the bite had been harmless, as was alleged subsequently—it would not have required a strong antidote. But why this secrecy? Could the unscientific attitude the Medical Society of Victoria assumed towards me a few months previously have had any casual connection with it? As serious cases of snakebite not unfrequently occur in the sparsely populated districts, in which the nearest medical man could not reach in time, I have yielded to numerous appeals from persons so situated in all parts of Australia, and assumed the responsibility of placing the antidote at their disposal. Mr. M. S. Rome, chemist and druggist, of this place, now supplies—in a small pocket case—the antidote, with hypodermic syringe and printed directions issued by me, which any intelligent layman can execute with perfect safety.

## THE TREATMENT OF HYPERPYREXIAL SUNSTROKE BY THE COLD BATH.

READ BEFORE THE QUEENSLAND MEDICAL SOCIETY.

BY H. F. FORBES, M.B. ET CH.M. ABERD.,  
RESIDENT MEDICAL OFFICER, BRISBANE  
HOSPITAL.

LAST year we admitted into the hospital four severe cases of sunstroke, the notes of which may be of interest to you as illustrating the vigorous action of the cold bath in hyperpyrexia.

### CASE I.

E.G., admitted 21st Jan., 1888, at 2.30 p.m., in deep coma; face dusky, covered with profuse perspiration, involuntary evacuations, pulse 176 and very small; temp. in axilla, 105°4.

After 10 minutes' bath at 75° and iced water poured on head the coma passed off and face resumed its natural colour. As the temperature fell he was delirious with clonic spasms of the extremities, then very restless, and finally quiet. On being put to bed he became noisy, had extreme terrors and a violent rigor amounting almost to a convulsion. In 15 minutes his pulse was 160; his temp. in axilla 108°4. Bathed a second time. In 10 minutes he was sensible; his pulse was 180, and temp. in rectum 102°.

He slept well throughout the night, and next morning his pulse and temp. were normal.

### CASE II.

J.C., admitted 19th December, 1888, at 1.30 p.m., in deep coma; pupils contracted and immovable, cornea insensible, face livid, skin covered with cold clammy sweat, involuntary evacuations, respirations gasping and hurried; pulse small, very feeble and 140; axillary temp. 107°5. Iced bath of 68° for 45 minutes. After the coma gave way he coughed up much mucus, and vomited several times; was delirious, with his extremities more or less rigid, and slowly became quiet. His pulse was full, regular, and 72, and his temp. in rectum had fallen to 96°. On leaving the bath he became violent, but was soon put to sleep by  $\frac{1}{4}$  gr. morphia hypodermically, and awoke at six o'clock the same evening quite conscious and without any headache.

### CASE III.

G.G., aged 70 years, admitted 20th December, 1888, at 5 p.m. in deep coma; pupils contracted and immovable, face livid, involuntary evacuations, respirations laboured, gasping and 80 per min.; pulse weak, small, and 140;

temp. in rectum 105°4. After 40 minutes of an iced bath the coma yielded; he struggled, coughed, and vomited, shouted and muttered, and then became somewhat quieter. His breathing improved and pupils dilated; his pulse was stronger and 116, and rectal temp. 98°4. On being removed to bed his temperature soon rose, and his restlessness increased; became violently delirious and quickly comatose; breathing gasping, lips blue, extremities quite cold, body covered with cold, clammy sweat; pulse thready and 160; temp. in rectum, 108°8. On being placed in the bath his condition improved, and after an hour he was returned to bed with face of good colour, extremities warm, pupils acting and dilated, and only slightly delirious; pulse sustained and 100, and rectal temp. 99°5; slept well throughout the night.

Next morning he was sensible, but very prostrate; talked, but indistinctly and with effort; took drinks well; pulse 80, but very feeble; temp. 102°.

He died rather suddenly five days after of cardiac failure.

#### CASE IV.

J.C., admitted 23rd December at 5.30 p.m., semi-conscious, pupils widely dilated, struggling very violently, skin very hot and dry, pulse and temp. could not be taken on account of violence. Cold bath till he became conscious and his temperature normal in rectum; was noisy in bed, but slept soundly after  $\frac{1}{4}$ gr. morphia till morning, when he said he had no headache and felt quite well.

#### NOTES.

1. The pathology of sunstroke with reference to the treatment. Formerly sunstroke was held to be due to congestion of the brain, and bleeding was the treatment. Now, however, it has been well established that though hyperæmia of the brain occurs, it is exceptional; that the essential lesions are pulmonary; and that the characteristic symptoms are due to paralysis of the brain centres by the overheated blood. Hyperpyrexial sunstroke is simply a paralysis of the heat-regulating mechanism with consequent paralysis of the vaso-motor and respiratory centres. If this paralysis is sudden, coma occurs at once; if gradual, three well-marked groups of symptoms appear in order, viz., restlessness with confusion of thought, delirium with epileptiform convulsions, and finally coma. These symptoms being due to the high temperature, the principle of successful treatment must be the abstraction of heat and the rousing into action of the paralysed brain centres. This is best accomplished by the iced bath. The water is reduced to 65°, or lower if ice is plentiful. The patient is placed in the bath, and iced water

from a height of 4 or 5 feet is poured on his head. He is watched carefully, and his temperature taken frequently, either in mouth or rectum. As his temperature is reduced he becomes delirious, then restless, and usually falls asleep to awaken convalescent. The patient on being put to bed may have a relapse, and as the temperature rises appear the stages of confused thought, delirium, and coma. These relapses should be anticipated with the cold bath so soon as the patient becomes very noisy with a rising temperature.

2. Chart showing action of bath on temperature and pulse in three cases:—

	BEFORE.			AFTER.	
	Temp.	Pulse.	Bath.	Temp.	Pulse.
Case 1.....	105°4 (Ax.)	176	10 min.	102° (R.)	112
Relapse ...	108°4 (Ax.)	160	10 min.	102° (R.)	130
Case 11 ...	107°5 (Ax.)	140	45 min.	96° (R.)	72
Case 111...	105°4 (R.)	140	40 min.	98°4 (R.)	116
Relapse ...	108°8 (R.)	160	60 min.	99°5 (R.)	100

3. Success of bath treatment. Formerly, when bleeding was the routine treatment of sunstroke, recovery was exceptional. In India at the present time, where the wet pack and douche in some form or other are used, the mortality is almost 50 per cent. Of the four severe cases treated here, three were admitted in such an alarming condition as to make us hesitate using the cold bath—dreading syncope—yet in a short time marked improvement became evident in pulse and respiration. All recovered from the hyperpyrexia. Three were discharged without any symptom, and the fourth—an old man of very intemperate habits—died five days after of syncope. The result is encouraging, and in the iced bath I think we have a prompt and efficient remedy for this form of sunstroke. To be successful, however, it must not be withheld on account of the thready pulse, gasping respiration, and cold skin of hyperpyrexia, but must be used quickly and boldly in the face of such apparent contra-indications. Then will be demonstrated in a manner not to be forgotten that the cold bath, instead of inducing greater collapse, acts as a very powerful and unique stimulant.

FRESH CALF-LYMPH from the New Zealand Vaccine Institution at Hastings, supplied at 2s. 6d. per tube, by L. BRUCK, Sydney.

NOTICE TO QUEENSLAND SUBSCRIBERS.—Having learned that a person named John Rattiff, in Brisbane, has been collecting monies on my behalf, I hereby inform subscribers to the *A. M. Gazette* in Queensland, that the said person has no authority to do so, and that his receipt will not be recognized.—L. BRUCK, Publisher *A.M.G.*

## PROCEEDINGS OF SOCIETIES.

## SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY MEETING held at the Adelaide Hospital on the evening of Thursday, April 25, at 8.30 p.m. Present: The President (Dr. Stirling), Dra. Hayward, Clindening, Gardner, Davies Thomas, London, A. E. Wigg, Niesche, T. K. Hamilton, H. H. Wigg, Ewbank, Symons, Cleland, Finnis, A. A. Hamilton, Marten, Swift, Professor Watson, and the Hon. Sec. (Dr. Poulton).

The minutes of the previous meeting were read and confirmed.

The SECRETARY read an interim report from the Council with reference to publication of proceedings as follows:—In accordance with DR. VERCO's motion, carried at the last General Meeting, the Council have the honor to report that they have taken into consideration the matter of publishing the proceedings of the Branch. They have, however, been unable to ascertain fully the opinions of country members in time for this meeting. They recommend that the branch consider favourably the offer made by the publisher of the *Australasian Medical Gazette*, which, they think, meets all the requirements of the Association for publishing and recording its transactions." (This offer was explained to include printing all the transactions and papers of the Branch every month in the *Gazette*, and supplying to the Branch, at the end of the year, 150 copies, bound, of their transactions, for distribution among the members).

While the Council does not consider some comments made on the manner of conducting the business of the monthly meetings altogether warranted, they are aware that their conduct is capable of improvement, and, assured as they are of the cordial co-operation of members, they anticipate such a ready and regular despatch of work as shall render further criticism beside the mark.

The Council is of opinion that the accommodation and rooms used by the Branch meet every requirement, and they have always understood that fair facilities for the examination of exhibits has been afforded to all members present. They have hitherto received no complaints on this head.

It is to be regretted that, occasionally, some of the papers provided are not read, owing either to the default of authors or a plethora of matter; but the Council cannot be held responsible in the first instance, and they deem it better to provide ample material for each meeting—at the risk of "remarks"—rather than to call members for comparatively barren sessions. The want of concise notes of cases exhibited is simply due to individual members neglecting the written request—posted in the room at several meetings—asking for their regular production.

The Council will be always happy to consider suggestions for the advancement of the Branch. They propose for the consideration at the next annual meeting the following suggested By-Laws:—

"By-Laws providing for meeting at 8 p.m. to exhibit cases, &c.

DR. T. K. HAMILTON of Laura, showed a boy suffering from amaurosis due to a cerebral lesion.

## CASE OF OPTIC ATROPHY FOLLOWING INJURY TO THE HEAD.

By DR. T. K. HAMILTON.

Boy, aged 8 years; strong, healthy, up to December 2, 1887, when he fell at school from the trapeze on the vortex, and was picked up unconscious. He remained so for some little time, and then began to vomit, and complained of pain in head. Next day the headache and vomiting persisted, the latter always came on when he sat up erect. He lay in a half stupid condition nearly all the time, and when walking held his head over to left side. He remained in this condition for 3 weeks, and in addition became very irritable and cross; refused food; had some spasmodic movements of left side, and sight was impaired.

About December 22, his symptoms became much more aggravated, the pain in the head became intense; the vomiting more constant; he wandered in his mind; was hard to manage when aroused out of the stupor, and his vision became more defective. The latter, however, about this time showed for a short time a very decided improvement, but it did not last long.

March 4, 1888.—Seen for first time; child seems now in fairly good health, and is gaining flesh; gait rather unsteady, and head somewhat leaned to left side; no headache or sickness; no patellar reflexes; no perception of sight; pupils widely dilated and immovable; discs both abnormally white on temporal sides; retinal vessels of normal size, and veins not tortuous; no hæmorrhage, and no irregularity of margins, or other signs of papillitis having existed. Ordered Potassii Iodide gr.ii ter die and inunction of Mercurial Oint., night and morning. Priessnitz crisis to nape.

After a fortnight of this treatment, he noticed he could see the difference between light and darkness, and could actually distinguish a dark object before him, and the pupils began to act to light slightly.

The mercurial inunction was steadily continued with the Pot. Iodide for two months, the boy getting fat and plump all the time, and it was then omitted and the iodide given in gradually increasing doses up to 3grs.

On September 10 I made the following notes: Pupils contract to light. Can distinguish where light is in a room, and can recognize certain dark objects in a good light.

Discs uniformly greyish-white colour; vessels somewhat smaller; no perioculitis, and lamina cribrosa fairly visible. Mercurial inunction recommended with the Iodide as before, and crisis to nape.



On Feb. 10, 1889, vision same as last note. Pupils both contract to light up to about 4 M.M. Discs and vessels not altered. Leave off all treatment for a time.

Present condition, April 25, 1889.—Boy in excellent health. Vision scarcely so good as at last note. Pupils act as before. Discs somewhat more blueish-white and slightly capped. No vessels apparent on the disc itself. The retinal vessels not diminished in size any more, and no perioculitis.

The points of interest in the case are: I. The clearly cerebral origin of the change in the optic nerves, which has resulted in atrophy, it would seem probable that a vascular meningitis was set up by the injury, and that the inflammatory exudation connected with it caused the pathological conditions in the nerves. I think the improvement which followed the exhibition of mercury would rather favour this view.

II. The entire absence of any visible sign of papillitis.

III. The slight diminution in size of the retinal vessels, compared to the almost complete amaurosis, and that after the lapse of 15 months.

IV. The restoration of pupil mobility and light perception under the mercurial and derivative treatment, and the excellent health maintained throughout.

#### DISCUSSION ON DIPHTHERIA.

DR. LONDON said that he took part in a discussion which followed a very able and suggestive paper by Dr. Corbin some four years ago, and that since that time very little light had been thrown upon the etiology of the disease, but in the *British Medical Journal* for February 9, 1889, he noticed an announcement that the authorities of the Pasteur Institute believed that they had identified the microbe of Diphtheria; that it secreted a soluble poison, which when injected into animals caused all the manifestations of the disease, and which in its general behaviour resembled the ferments; and that it appears likely to produce immunity in animals. It had occurred to him as to whether it was possible that human beings could contract Diphtheria from domesticated animals and fowls, who in turn might contract it from putrid vegetable matter. As regards the cause of death after tracheotomy, in most cases it seemed to be one either to general septicæmic infection, or to septic bronchopneumonia, but in his experience it was very unusual, in post-mortem examinations, to find extension of the membrane below the tube. With regard to the time to be chosen for operating, he thought that no rules could be laid down; they had to deal with the very natural repugnance of the parents to the performance of the operation, and they had generally to assure parents that the chances of recovery were in their opinion very small, before they could get permission to operate. He did not attribute much importance to the advantages of nursing, for in each of the three cases he had operated upon in private, the result was successful, whereas four hospital cases had died. He

again ventured to express an opinion that the mortality from Diphtheria in Adelaide was much less than in the large cities of England, apart from laryngeal complications.

DR. DAVIES THOMAS thought many cases of simple laryngitis in children were mistaken for Diphtheria.

DR. A. E. WIGG said he would not operate in Diphtheria on children under three years old, or far from home. He advocated further trial of Perchloride of Mercury.

DR. A. A. HAMILTON mentioned a case of laryngeal diphtheria becoming subsequently pharyngeal, and recovering under Perchloride of Mercury. He had for some years used this remedy. He looked upon it as a valuable local antiseptic, and for that reason preferable to the Salicylate of Soda.

DR. GARDNER thought many favourable cases of tracheotomy were done in laryngitis, not diphtheria. He had seen but one recovery after tracheotomy in laryngeal diphtheria. He thought intubation was probably the best method for the ordinary practitioner after practising the introduction of tubes. This method avoided septic pneumonia, so often caused in tracheotomy. He also thought discussions on diphtheria the most fruitless of all discussions, on account of the very unreliable data. He believed that there was no diphtheria unless the case developed paralysis of the soft palate after.

DR. HAYWARD had been more fortunate than the last speaker in having seen several recoveries after tracheotomy in true diphtheria of the larynx. The superior advantages of intubation had yet to be shown. The method had been already discarded by one able man, Dr. Snowball of Melbourne.

DR. SWIFT was quite at variance with Dr. Gardner. He was sure that diphtheria was not always followed by paralysis of the soft palate. He had seen recoveries after tracheotomy at 15 and 18 months of age. As his paper previously read expressed his views, and the discussion has been called fruitless, he would say no more.

DR. GARDNER then read the following two papers:—

#### RETROFLEXIONS OF THE GRAVID UTERUS.

BY WILLIAM GARDNER, M.D., C.M. GLAS.  
LECTURER ON SURGERY, ADEL. UNIVER-  
SITY, AND SURGEON ADEL. HOSPITAL.

THE subject of Retroflexion of the Gravid Uterus is of such great importance to all practitioners that I determined to bring before you this evening three cases which have occurred in my practice. They will form a basis for a discussion of the many important questions involved, and may direct attention to a condition which, I think, must be frequently overlooked. The symptoms, which caused me to make an examination in the 1st and 3rd cases, were an excessive amount of sickness occurring in multiparous women, and difficulty in locomotion; and, in addition, in No. 3, there was the fact, that this pregnancy had been preceded by two abortions occurring about the end of the third month. In the 2nd case, I was inquir-

ing into [the cause of excessive hæmaturia, from which the patient suffered, and had come to the conclusion that she was suffering from tuberculosis of the kidneys. Whilst consulting me she missed two periods, and became so much worse that I examined and found a retroflexed and impregnated uterus. The treatment which I adopted in Nos. 1 and 2 was reposition, with the patient in the genu-pectoral position—two fingers of the left hand being passed into the post fornix to gently elevate the fundus, and the index finger of the right hand being passed into the upper part of the vagina, and used to press back the cervix. Conjoined pressure backwards and elevation succeeded in each case in reducing the malposition. A Thomas's Hodge-shaped pessary was in each case used, and in Nos. 1 and 2 the patient was kept in bed for a month, lying in the left lateral position. In both cases the malposition was again found on examination at the end of a fortnight. Similar treatment was followed, and in both cases with success.

The third case was replaced at my rooms, and the malposition did not recur.

In none of the cases were any anæsthetics administered.

Mrs. N. consulted me during the early weeks of her pregnancy for excessive vomiting and difficulty in locomotion. I made an examination and found the uterus retroflexed and enlarged to an extent which corresponded pretty fairly with the duration of pregnancy. Adopting the genu-pectoral position, and with the same manipulation previously described, I reduced the uterus and inserted a Hodge. Patient was kept in bed for two weeks, and on examination at the end of that time I found the uterus again retroflexed; followed a similar course of action with success, and the displacement did not recur.

My friend, Dr. Hayward, delivered the patient at full time of a healthy living child.

Mrs. A. F. consulted me first on 6th Dec., 1886, married three years. One child living, æt. one year and nine months. Nine months ago illness began with frequency of micturition, and great pain after the act. The urine contained clots of blood and mucus. Before marriage patient suffered from anemia, and was always considered delicate. Her mother died of phthisis, her father was drowned; brothers and sisters healthy. Since weaning the baby has been regular, until three months ago, when the interval became six weeks; great pain during the first day; no dyspareunia. Urine contains albumen and, under the microscope, vaginal and renal epithelium with blood corpuscles, phosphate of lime crystals; no casts. Bladder examination revealed no sign of stone or tumour. Heart and lungs normal, weight 7st. 8lb., no cough.

**Uterine Examination.**—Retroflexion and cervical rents. Recommended Hodge pessary. Diagnosis of tubercular kidney probable.

16th December, '86.—Last unwell on 20th October '86. Taking Benzoate of Soda, much less blood in urine. Pregnancy probable and pessary not inserted till after question of pregnancy settled. Later on the diagnosis of pregnancy became certain, and the uterus was reduced by placing patient in the genu-pectoral posture and passing two fingers of the left hand into the posterior fornix, gently pressing the body of the uterus upwards, and the index finger of the right hand was used to press the cervix backwards. This manœuvre was successful, the uterus gliding past the sacrum. A Hodge pessary was then inserted and the patient made to lie on her left side in bed. In a fortnight another examination was made, and the retroflexed uterus was found to be lying on top of the Hodge. Similar treatment was adopted, the uterus again replaced, a Hodge inserted, and after this date the displacement did not recur.

At about the end of the fifth month her health became so feeble that I asked Dr. Thomas to see the patient with me, and we decided to resort to the induction of premature labour. The patient, who lived some miles out of town, was brought in and taken to the P. H. W. S., where she remained quietly for two days, and on the next day labour came on spontaneously and terminated quickly, but the patient died of exhaustion the same evening.

Mrs. O'C. consulted me first on 18th January, '89; married 10 years; four children; two died at five and six months; two miscarriages since last was born three years ago; never unwell since last child was born. Excessive vomiting began six weeks ago, and on examination there was found retroflexion of a gravid uterus. On 24th January the uterus was replaced in the usual way, and a Hodge inserted. She was examined again on the 31st January and 14th February, and no displacement having recurred, the pessary was removed, cleansed, and returned. The pessary was last removed on the 2nd March, at which time she had passed three months of her pregnancy. The position of the uterus was normal; the pessary was changed, and she returned to her home in New South Wales.

The points upon which I wish to lay stress are:—

- (1.) The importance of making a vaginal examination in all cases of early pregnancy in which any of the usual symptoms are exaggerated.
- (2.) That if detected before incarceration occurs, reposition should be effected

without an anæsthetic as the genu-pectoral posture favours reduction.

- (3.) If incarceration has occurred, indicated by retention and dribbling of urine, then I would recommend the use of an anæsthetic, because the pain would be necessarily greater, and the use of it would facilitate catheterism.

### CASE OF COLEO-CYSTOTOMY, WITH UNUSUAL COMPLICATIONS.

BY W. GARDNER, M.D., CH.M., GLASGOW.

IN 1878, Mrs. D., æt. 34, consulted me for a tumour of the right breast, which was removed.

In 1879 she first complained of pain in the region of the gall-bladder, running round to the back. It was very severe, lasting about 48 hours, and as she lived in the country no treatment was employed except the application of hot flannels. She was then brought to town, and I found a swelling between the lower edge of the liver and the umbilicus, the nature of which was not very certain. Three years after she had a very bad attack, and, in consultation with Drs. Görgér and Stirling, the conclusion arrived at was that she was suffering from gall-stones, and a few days afterwards the first gall-stone was found. For the next 18 months she had pretty constant attacks, the last one being accompanied by an attack of jaundice, which remained seven weeks. After this disappeared she remained free from pain, and got about fairly well. Two years since she had a slight attack, and others followed pretty regularly every two or three weeks till September 17, 1888, when coleo-cystotomy was performed. The usual incision was made over the enlarged gall-bladder, and along the outer border of the right rectus muscle. On opening the peritoneum the gall bladder came into view, and was felt as hard as a stone. An opening was made into it, and 15 gall stones removed from different loculi, resembling very much the spaces in honeycomb; each was levered out with a sharp spoon. No bile flowed out until the last stone was removed, and then only in small quantity. The edges of the gall-bladder were stitched to the abdominal wall, and a drainage tube inserted.

Not to weary you with details, I will only state that the temperature only once exceeded 100° F., and reached normal on the 11th day. On the 25th September several sutures were removed, very little bile flowing from the wound. On the 26th the discharge of bile was more copious, and on the 27th there was so much pain that it became necessary to administer  $\frac{1}{4}$ gr. of morphia. When the patient left the private hospital on 8th October,

the wound was perfectly healed. In November, after a painless interval of two months, all the old pains returned, but more frequently than ever, with occasional attacks of jaundice.

A thoroughly systematic search was made for gall stones without result, and I then came to the conclusion that there must have been a stone left behind which was of such a shape as to engage in the common duct for a sufficient length of time to cause jaundice, and that it then fell back again. This seemed to me the only theory that would fully explain the symptoms, but as the hot weather was coming on I determined to keep the case under observation. Matters continued much as before till the end of February, 1889, when I was called to see her, and found her with severe rigors, intensely jaundiced, and the abdomen so tender that she could not allow it to be examined. After this attack passed off she was removed to the Private Hospital, Wakefield-street, where on the 2nd March, with the assistance of Drs. Giles and Marten (Dr. Todd administering ether), I re-opened the old incision. Before doing so I felt a small hard substance in the line of the cicatrix; this turned out to be a small gall-stone, which I removed. The gall bladder was then found to be obliterated and converted into a thick fibrous cord. No opening could be made into it, and I therefore made a transverse incision towards the middle line of the body to enable me to examine the common duct. Nothing could be felt in this situation, and I then managed to make an opening into the gall-bladder, just at the commencement of the cystic duct, and a small quantity of bile flowed. Through this a probe was passed down in the direction of the common duct, but no stone could be felt. The unobliterated remaining part of the gall-bladder was then divided across and the edges of it attached to the abdominal wound. The rest of the wound was closed in the usual manner. A small drainage tube was inserted into the cystic duct. The patient made a tedious recovery, unmarked by anything eventful, except the formation of an abscess in connection with the edges of the wound. She left the hospital in a month with the wound firmly healed. Since then she has had no return of pain, and is to all appearance perfectly well.

On the morning of the last operation the patient stated that she believed she had passed the gall-stone. As she had so often said this before no particular attention was paid to it. However, when at the operation no stone was found in the common duct, the first evacuation was thoroughly searched, and a very large gall-stone of unusual shape was discovered.

*Remarks.*—This case is peculiar from the fact that at the time of the first operation a gall-stone

had passed from the cystic duct, and was, therefore, missed. Owing to its peculiar shape it is probable that during all the months which followed it was in the habit of engaging to a certain extent in the common duct, causing jaundice and then retreating again. Curiously enough, the day before the last operation, after an exceptionally severe attack, it passed into the intestine. The lesson to be learned from the case is, that to obviate a similar disaster it should be a rule of practice to probe through the cystic duct at the time of performing a coelo-cystotomy, lest there should be any stone which had just passed out of the gall bladder, and might be a source of future trouble. Had this been done in this case, the patient would have been saved the risk of a formidable operation, and the surgeon the annoyance of not relieving his patient; for even if the stone had proved too large to be drawn back through the cystic duct, it might have been crushed *in situ*, and afterwards have readily passed into the duodenum.

#### NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 79th General Meeting of the Branch was held in the Royal Society's Room, Sydney, on Friday, 5th April, 1889. Present:—Dr. Fiaschi, President, in the chair; Drs. Hankins, Quaife, Jenkins, Todd, Clubbe, Reddall, Cohen, R. Bowker, jun., Marshall, Lyden, Scot-Skirving, Pockley, Worrall, Hodgson, Crago, Knaggs, Fisher, Marano, West, Huxtable, Parker, and Rennie. Visitors: Drs. Turner, de Lambert, and Wright.

The minutes of the previous meeting were read and confirmed.

DR. FIASCHI thanked the members for having elected him president for the current year, and stated that he would be glad of the co-operation of the members in making the society a continued success. The meetings of the Branch afforded an opportunity of exchanging ideas one with another.

DR. JENKINS exhibited a specimen—Hydatid of the heart—and explained the cause.

DR. FIASCHI said he had seen a similar case of rupture of the heart during his practice at Windsor. A woman was driving a cart, when she was observed to fall, and when picked up was dead. The *post-mortem* revealed an undoubted case of perforation and rupture.

DR. WORRALL read the following notes on "Examples of Ovarian Disease" with two exhibits:—

DERMOID CYST OF LEFT OVARY,  
SIZE OF LARGE ORANGE, RIGHT  
OVARY, CYSTIC, SIZE OF HEN'S  
EGG.

THIS beautiful specimen of Dermoid disease, containing a mass of dark hair, with cystic condition of ovary of opposite size, I removed seven weeks

ago, with the assistance of Drs. Goode and Hankins. The patient was 30 years of age, married nine years, two children, last seven years ago. Since this labour, had suffered from great back-ache and bearing-down pain, with agonising dysmenorrhœa. Three-and-a-half years ago had a severe attack of "inflammation of the womb," ending in an abscess which burst into vagina. I first saw her in July, 1887, and noted a tense cyst in Douglass's pouch, so low down as to cause rectocele, and also a smaller cyst in the right fornix. Patient refused operation then and continued under my care during the next two years. In this time she had one very severe, and several moderate, attacks of perimetritis; in fact, for three months before operation she partook of no solid food whatever, and scarcely a day passed without vomiting. She was, in consequence, reduced to a condition of extreme weakness, and, as she said in at last consenting to operation, "felt she could not live much longer unless something was done." Excepting for a slight increase in size of the cysts and more tenderness, physical signs were the same. The operation showed both cysts to be closely adherent, especially the left, which was so matted to surrounding parts in the true pelvis as to make its removal a matter of extreme difficulty. Anticipating this, I had had the vulva shaved, and with the vagina, thoroughly disinfected, so that I was able to assist the hand in the abdomen by the other in the vagina. In this way I gradually enucleated the tumour from its adhesions. I consider the hand in the vagina an invaluable aid in these cases of cysts impacted in the true pelvis, or pyosalpinx, and I think it is time all prejudices in this matter were laid aside. The latest authority on abdominal surgery warns against any interference with the vagina during operation, but I fail to see why the vagina may not be made as aseptic as any other part of the body, and in this instance I had no reason to regret having made use of it. A drainage tube was inserted for 48 hours, owing to the oozing from the numerous torn adhesions. With the exception of a rise to 100° on the evening of the second day, the temperature ran a subnormal course, but, as was to be expected from the condition of the patient prior to operation, recovery was slow, and the great prostration caused me much anxiety. She is now, I am glad to say, about again, and in a much better condition of health than before operation. The case is a good example of the danger in delaying operation when once the necessity for it is made clear.

The next specimens, *large unilocular Cyst of left Ovary*, and *Dermoid, size of orange, of right*, were removed from a girl, æt. 20, who had first noticed an abdominal enlargement two years pre-

viously, and had been gradually increasing in size since. She had been accused of pregnancy, and a medical man endorsed this opinion. Time proved the falseness of this belief, and coming into the hands of Dr. Murray, of Parkes, he sent her on to me for operation.

I diagnosed a unilocular ovarian cyst, and anticipated an easy operation.

The greatest girth was  $36\frac{1}{2}$  inches, and the uterus was displaced backwards. The menstrual flow was regular and normal, which is interesting in view of the total destruction of both ovaries.

The operation proved after all to be a difficult one, owing to adhesions to Parietes, intestine, and liver, necessitating extension of the incision almost to the umbilicus, and the free use of ligature and pressure forceps. The fluid drawn off measured 14 pints. The Dermoid Cyst of opposite side contained hair and sebaceous matter, and being non-adherent was easily removed. No drainage tube was used. Recovery was easy and rapid, the temperature remaining normal until the fifth day, when cystitis developed and proved very troublesome. The prevention and cure of this distressing complication I hope to deal with on a future occasion.

The subject of Dermoid Cyst is still by no means clear. Researches by Poupinel and Bland Sutton seem to show that there is a direct gradation between the Graafian follicle, the multilocular, and the Dermoid Cyst, and that transitional stages between each have been detected. The multilocular Cyst having a lining of mucous membrane may develop every kind of mucous gland, and the Dermoid Cyst, being lined with Epithelium which has become epidermoidal in character may bear every kind of skin appendage. This is a plausible theory as far as it goes, but it leaves unsolved the mystery of why these changes should occur.

The hair found in these tumours is generally blonde or red, black hair, as seen in this case, being very rare. (Winckel.)

DR. CRAGO read some notes on a case of Empyema (bi-lateral).

DR. SCOT-SKIRVING said he had listened with great interest to the paper of Dr. Crago, and remembered a case of double empyema he (Dr. Skirving) saw in the practice of Dr. Lovell. Both openings in the chest were present at the same time. As to the matter of double pleuritis, it is frequently seen in pregnant women and is suggestive of after-coming phthisis. With regard to the question of rib excision, his (Dr. Skirving's) experience was that if there was a fair amount of room there was no need to cut the rib; but in young children he had been in the habit of cutting the rib for drainage purposes.

DR. CLUBBE remembered a case of a child he had attended about a year ago suffering from double empyema. He (Dr. Clubbe) had operated much in the

same way as Dr. Lovell had done, and the result had been highly satisfactory.

DR. CRAGO in reply stated that one tube had been used for 26 days, and the tube on the other side was allowed to remain in 25 days.

DR. WORRALL exhibited a sample of Cellular Clothing, and explained its advantages.

## PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners by the respective Boards:—

### NEW SOUTH WALES.

Barker, John, M.B. Durham, 1885; M.D. Durham, 1887; M.R.C.S. Eng., 1886; L.S.A. Lond., 1886.  
Gardner, Henry Willoughby, M.R.C.S. Eng., 1885; L.R.C.P. Lond., 1886; M.D. Lond., 1888.  
Henry, Arthur, M.B. Syd., 1889.  
Hester, Jeaffreson William, M.B. Syd., 1889.  
Hinder, Henry Vincent Oritcholey, M.B. Syd., 1889.  
Kelly, Patrick John, M.B. Syd., 1889.  
Kirkland, Hugh, M.B. Glasg., 1888; M.S. Glasg., 1888.  
Mills, Arthur Edward, M.B. Syd., 1889.  
Oliver, John, M.R.C.S. Eng., 1885; L.R.C.P. Lond., 1886.  
Trindall, Richard Barsillal, M.B. Syd., 1889.

### NEW ZEALAND.

Barclay, Herbert Clifford, M.B. Univ. N.Z., 1889.  
Jeffcoat, Frederick Howorth, M.B. of Ch.M. Edin.

### QUEENSLAND.

Cumming, William, M.B. of Ch.M., 1883, M.D. 1885, Edin.  
Daly, Charles Andrew.  
Jack, Alexander.  
L'Estrange, Guy Stuart, L.R.C.S. Irel., 1886; L. of L. Mid., K.Q.C.P. Irel., 1886.  
McDonnell, Aeneas John, M.B. of Ch.M. Syd., 1889.  
Morgan, Thomas Howard.  
O'Flannagan, Andrew Joseph, L.R.C.S. Irel., 1883; L.K.Q.C.P. Irel., 1884.  
Quinnell, Richard James, M.D. of Ch.M. Aberd., 1868.

### SOUTH AUSTRALIA.

Pears, Humphreys Robert Henry, L. of L. Mid. K.Q.C.P. Irel., 1887.

### VICTORIA.

Adams, John, L. of L. Mid. R.C.P. of R.C.S. Edin., 1888; L.F.P.S. Glas., 1888.  
Corry, Alexander, M.D., M.A.O., R. Univ. Irel., 1885.  
Embley, Edward Henry, M.B. of Ch.B. Melb., 1889.  
Langlands, Francis Henry, M.B. of Ch.B. Melb., 1889.  
Lawrence, Henry, M.R.C.S. Eng., 1880; L.S.A. Lond., 1880; L.R.C.P. Lond., 1887.  
Lawrence, Arthur Septimus, M.B. of Ch.M. Edin., 1888.  
Laycock, George Lockwood, M.B. of Ch.M. Edin., 1876.  
Lewers, Richardson Wakefield, M.B. of Ch.B. Melb., 1889.  
Moreton, Charles Peyton, M.R.C.S. Eng., 1864; L.S.A. Lond., 1867.  
Pacey, Frederick John, L. of L. Mid. R.C.P. of R.C.S. Edin., 1888; L.F.P.S. Glas., 1888.  
Warren, Thomas, L. of L. Mid. R.C.P. of R.C.S. Edin., 1888; L.F.P.S. Glas., 1888.

### Additional Qualifications registered:—

Andrews, William, Ch.B. 1888, M.D. 1889, Melb.  
Balls-Headley, Walter, F.R.C.P. Lond., 1868.  
Cussen, Gerald E., Ch.B. Melb., 1888.  
Hayes, Horace F., Ch.B. Melb., 1887; M.R.C.S. Eng., 1888.  
Macknight, Conway M., Ch.B. Melb., 1888.  
Pinnock, Robert D., M.D. Glas., 1885.

## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castle-reagh Street, Sydney.*

*\*\* Contributors can have their Papers reprinted and published in Pamphlet form, at Cost Price, if the necessary instructions are given to the Publisher at the same time the contributions are sent in.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, MAY 15, 1889.

## EDITORIALS.

### THE LAY PRESS AND IRREGULAR PRACTITIONERS.

In the *Illustrated Sydney News* for this month on page 23, is printed an article—apparently an editorial production—which is of such an extraordinary character that as a matter of public, and not merely professional, interest, we feel it our duty to re-publish it here in full :—

"An observation of the result of Dr. Fawcett's treatment of the revolting and fell disease of cancer could not fail to impress one that his system of dealing with the affliction embraces some very powerful remedial qualities. We had an opportunity of witnessing the treatment of several patients at his surgery, Harristreet, a few days ago, on some of whom the malady had obtained a shocking hold, and the sufferers appeared to rely upon the Doctor for recovery from the torments of the plague with which they were troubled. Nothing could be more distressing than the sight of so much human suffering as was presented by these patients. Some had only recently been attacked, and the Doctor's treatment was working wonders for them, whilst in other instances almost half the face or breast was eaten away, and it would appear almost impossible to prevent the total destruction of the part affected, or to save the victim from a miserable death of slow but sure corruption. The medicine used by this homœopathic physician is a transparent fluid, and is varied very slightly for either internal or external use, the properties of which are known only to the Doctor, who claims that it is one of the greatest discoveries of the age. The tincture certainly acts powerfully upon the corrupted parts, and quickly arrests the disease if applied in the early stages, as we had every opportunity of seeing from photographs of the patients taken at various times during the prevalence of the cancer. Whatever the healing agency may be, is at present a secret of the Doctor, who, being in the possession of such a remarkable medicine, should be able to distribute relief and promote recovery amongst many of those who are victims to the terrible affliction of cancer."

It is much to be regretted that a journal which is supposed to be of respectable character, should lend itself to the dissemination of what, in our opinion, must be a misleading statement to people unacquainted with the practitioner who is thus so authoritatively advertised. The "Dr." Fawcett, whose "secret remedy" is so fulsomely eulogised, stated in the account which he gave of himself when examined before the Select Committee of the Legislative Council of New South Wales, on June 8, 1887, that his only right to call himself "M.D." arose from his name being included in a book called the *Homœopathic Directory of Great Britain and Ireland*; that, with the exception of an apprenticeship of three months to a Dr. Dight in England in his boyhood, he had had no medical training; that his knowledge of anatomy, physiology, and pathology was "not much;" that he could not describe the circulation of the blood, saying: "My memory will not permit it; I am too old; I cannot retain anything hardly now in my memory." When asked what was his proper calling, he said that he "followed engineering, gas-fitting, and such like for some time." It appeared also that he had been an irregular practitioner, not only of medicine, but also of house-painting, for he said that he had "done that as well, but I never served my time to house painting." A witness, named George Edward Smith, gave evidence before the same Committee that he took his wife to Mr. Fawcett because he thought he was a properly qualified medical practitioner, for the treatment of a tumour which Drs. Schuette and Warren believed to be malignant, and which they recommended should be removed by operation; however, she dreaded the use of the knife, and so consulted Mr. Fawcett, who promised to remove it without the knife. "On the first occasion she saw him at his house, and he made incisions into the tumour with a lancet to the depth of about an inch and a quarter. After making the incisions, he injected some caustic. . . . This gave my wife intense pain, which was so great that she went into a fit on one occasion." The treatment did her no good, but made her worse, and after six months she left off going to him because "she went to his house one day and he was out, and his assistant, Miss Lawson, told her she could do just as much as Mr. Fawcett did to her, and she advised my wife to have nothing to do with him, and said she was worse than when she first went to him." On this witness's evidence being sent to him for revision he added: "All the people my wife knew when she was going to Mr. Fawcett had died, that is, those she asked about."

We have considered it our duty to go thus fully into the history of this unregistered practitioner

not because he is of any special importance, but because it is a case in which the evidence given before a Parliamentary Committee enables us to quote facts which are beyond dispute, and because we feel it our duty to point out the injury to the public which is likely to ensue on the publication of such articles in journals which are accepted as oracles by ignorant or unthinking people. We often see in newspapers of good standing in the colony, paragraphs which are evidently quack advertisements, duly paid for by the persons mentioned in them, but which are inserted in such a way as to appear to the general observer to be favourable criticisms by the editor. We would point out to the proprietors of such newspapers that the insertion of advertisements of this character, though it may be cash to them, often results in pain, distress, or even death, to gullible people influenced by them.

### THE QUEENSLAND MEDICAL BOARD AND AMERICAN DIPLOMAS.

WE have again to compliment the Queensland Medical Board on the firm stand it has taken in reference to the registration of American diplomas. We think it is only doing its duty to the public when it refuses to register the diplomas which practitioners have obtained in the United States, except under very stringent conditions, for though no doubt many of the licensing bodies in that country only grant diplomas under such conditions as insure that the candidate has gone through a proper course of study and has acquired a sufficient knowledge of the profession which he proposes to follow, yet many others, we fear a majority, take no such precaution but grant their degrees without due study or examination, sometimes even in the absence of the candidates. Another matter which renders the action of this Medical Board a public benefit, is the question of the identity of the applicant for registration with the person to whom the diploma was really granted. It is within our knowledge that on the diplomas of American universities of high standing men have been registered in New South Wales of such indifferent character and attainments as renders a doubt as to their identity with that of the person named in the document extremely justifiable. That the Queensland Medical Board has acted in the public interest and quite within its powers, is shown by the decision of the Supreme Court of that Colony, which declined to grant a rule to compel it to register such an applicant.

### MEDICAL ETIQUETTE IN THE AUCKLAND HOSPITAL.

THE following correspondence has been published in the *Auckland Press* :—

"March 17, 1889.

Sir,—One of my nurses has reported to me that you came into the ward this afternoon, and asked a number of questions as to the treatment, &c., of one or two of the patients here. As it happened, the nurse did not know you; but, in any case, it is understood that no nurse shall answer any questions as to the treatment—medical or surgical—of cases in her ward. Any information required may be supplied by the Resident Surgeon. You had, therefore, absolutely no right to question her, and I know of no other medical man who would have done so. I beg, also, to remind you that all the treatment of patients—after their admission here—is in the hands of the Hospital Staff, and no interference is allowed from those not on the staff. You had no right to enter the ward and make any inquiries as to the treatment of any cases in the Hospital without first consulting me and asking my permission, and I consider your conduct a marked breach of elementary professional etiquette. You will kindly bear this in mind in your future dealings with the Hospital.

I am, &c.,

THOS. W. BELL,  
Resident Physician."

Dr. Bakewell, Auckland.

"Hobson-street, March 18, 1889.

Sir,—I have the honour to acknowledge the receipt of your letter dated yesterday. In it you say, 'One of my\* nurses has reported to me that you came into the ward this afternoon, and asked a number of questions as to the treatment, &c., of one or two of the patients here.' In the first place permit me to ask why you called the nurse 'one of my\* nurses.' In what respect is she yours? Do you pay her, or engage her? She is simply like yourself, a subordinate engaged to carry out the orders of the honorary staff. You and she are public servants, and though in the official hierarchy you are her superior, this gives you no right to speak of her as 'my nurse.' Further, if she stated that I asked a 'number of questions,' about the treatment of one of the cases, she misinformed you. About one patient, I only asked if he were in the hospital. The other questions I asked were about the state of the patient whom I had sent in a few days before, and whom I had attended through a most dangerous illness. She volunteered the information that the patient's ankle had been poulticed, and as far as I can remember this was all that passed about treatment. As to the state of the case, she either knew nothing or would give me no information. But you go on to say that 'you had therefore absolutely no right to question her, and I know of no other medical man who would have done so. . . . You had no right to enter the ward and make any enquiries as to the treatment of any cases in the hospital, without first consulting me, and asking my permission, and I consider your conduct a marked breach of elementary professional etiquette. Herein I must join issue with you. In the first place, with regard to professional etiquette, I may be allowed to put my knowledge of it against yours. I was resident surgeon to a large London hospital, and afterwards to a large provincial one in England many years before you were born. I have been medical officer, honorary

or salaried, to ten hospitals, and I think I ought to know a little more about hospital etiquette than you do; and I maintain that in no public hospital in the British dominions is there any rule, expressed or implied, which would prevent a qualified medical practitioner from asking a nurse about the treatment of any case, whether it had been under his own care or not. You want to return to the *régime* of secrecy, which was destroyed in England sixty years ago, by the vigorous and persistent exertions of the late Thomas Wakley in the *Lancet*. You seem to think that the patients in a public hospital, supported by public funds, are like the private patients of a private practitioner. Even your own cards contradict your assumption. At the bed-head of every patient is a card with columns ruled for 'treatment' and 'diet,' and although the column for treatment is not filled up as it ought to be, there it is, and its presence shows that there ought to be no secrecy about the treatment. In every hospital that I have ever visited or been connected with, the treatment is set forth on the bed-head card, so that every medical man can read it. I have no copy of your rules, but I have no doubt that they require this to be done. Even then I might legitimately have asked the nurse questions as to the state and condition of the patient without infringing any professional rule, and I should have expected a civil answer. I must conclude by saying that a complaint about a breach of professional etiquette seems rather ludicrous from persons who designate themselves 'doctor' when they have no more right to that title than they have to that of duke.—I am, etc.,

R. H. BAKEWELL, M.D."

Thos. W. Bell, Esq.,  
Resident Physician,  
Auckland Hospital.

P.S.—As this correspondence is in reference to a matter of great public importance, I shall send a copy of it to the press.

[THE tone of the letter signed Thos. W. Bell, written in virtue of his position as Resident Physician of the Auckland Hospital, is most unfitting. For, though it is undoubtedly advisable that information as to treatment other than that which always is or ought to be recorded on the boards at each patient's bed, should be asked of the Resident Medical Officer, we certainly think that what from Dr. Bakewell's version were but trivial inquiries may be put to a nurse without harm ensuing.—ED. A.M.G.]

## LETTERS TO THE EDITOR.

### UNUSUAL TERMINATION OF A CASE OF PLACENTA PRÆVIA.

(To the Editor of the A. M. Gazette).

SIR,—On the afternoon of January 27, a nurse called and asked me to prescribe for a Mrs. H., a patient who had engaged me to attend her in her confinement, which was expected in about a month's time. The matter appeared to be a trifling one according to the nurse's account—a little pain and coloured discharge.

The same evening I was summoned hastily by the husband, who informed me that his wife was losing a large quantity of blood. I attended and,

on making vaginal examination, found the os just patent enough to admit one finger, with which I could feel the placenta low down and adherent on the right side, and almost occluding the os. The bleeding had now ceased. Dr. Kendall, of Petersham, kindly came down about an hour and a half afterwards. We went up to the room together, and he walked over to the bed to make an examination, while I was looking in my bag for some chloroform. Suddenly Dr. K. gave an exclamation of surprise, and called me over to the bed. The placenta was "born," and lying outside the external genitals, and this without very much pain or very much bleeding, during my absence of 1½ hours.

Dr. Kendall turned and delivered the dead child. I never saw a similar case, nor has Dr. Kendall. The woman made a good recovery.

Yours, &c.,

R. A. SIMPSON, M.B. ET CH.M. GLAS.

"Alva," Leichhardt (Sydney), April 1889.

### THE ELECTION OF HON. MEDICAL OFFICERS TO THE MELBOURNE HOSPITAL.

(To the Editor of the A. M. Gazette.)

DEAR SIR,—It has long been in my mind to call your attention to what appears to me to be a most unfair method of appointing Honorary Medical Officers to the Melbourne Hospital, and to ask you for an expression of opinion on the subject through the columns of the *Australasian Medical Gazette*.

The terms in which the Hospital calls for applications to fill the vacant positions are such as will allow of those possessing certain qualifications only being eligible for appointment, and to this I do not seriously object, but included amongst the acceptable qualifications are some which are not better, if as good, as the diplomas held by men who are not admitted to the Honorary Staff.

The conditions of appointment are as follows:—

*By-law 48. Qualifications for Physicians.*—"Except as hereinafter provided no person shall be capable of being elected a Physician unless, in addition to the requirements of the 'Medical Practitioners Statute, 1865,' he possesses the degree of Doctor of Medicine from some University in the United Kingdom, or in the Australian Colonies, or from some foreign University recognized by the University of Melbourne, or the diploma of Fellow from some College of Physicians in the United Kingdom, or, in the case of a person who has been engaged in the actual practice of his profession for not less than five years, the degree of Bachelor of Medicine from some such University, or the diploma of Member from some such College."

*By-Law 49. Qualification for Surgeons.*—"Except as hereinafter provided, no person shall be capable of being elected a Surgeon unless, in addition to the requirements of the 'Medical Practitioners' Statute, 1865,' he possesses the degree of Master of Surgery from some University in the United Kingdom, or in the Australian colonies, or from some foreign University recognized by the University of Melbourne, or the diploma of Fellow from some College of Surgeons in the United Kingdom, or, in the case of a person who has been engaged in the actual practice of his profession for not less than



five years, the Degree of Bachelor of Surgery from some such University, or the diploma of Member from such College.

The last line in each of these reads "or the diploma of Member from some such College," and this last condition is what is so unfair, for it makes eligible any M.R.C.S.E. to the exclusion of all Licentiates.

In my own case, which is that of many, I have been L.R.C.S.L., L. et. L. M.K.Q.C.P.I. and L.M. Rot. Hosp. since 1881, and, in addition since then, have been Medical Officer in charge of a Hospital with 14 beds, for one year, Hon. Physician for three years, and Hon. Surgeon for one year to the Auckland Hospital, and yet I am not eligible for appointment to the Melbourne Hospital, whereas any M.R.C.S.E., who has been in practice five years can be appointed. Surely the diplomas of L.R.C.S.L., and L.K.Q.C.P.I., are fully as comprehensive, if not more so, than the M.R.C.S.E.

What I contend is, that it is unjust to admit one, and refuse the other; either the M.R.C.S.E. should not be accepted, or the Licentiates of the United Kingdom should be equally eligible for appointment. If you think with me in this matter, a large section of the Medical community will be deeply grateful to you if you will express your views on the subject at an early date.

I am, Dear Sir,

Yours faithfully,

J. CARNEGIE MACMUILEN.

58 Collins-st., East,

L.R.C.S.I., &c.

Melbourne, May 1st, 1889.

#### —◆— SNAKE POISON. ◆—

To the Editor of the A. M. Gazette.

SIR—It is "passing strange" that even a M.A., M.D. should fail to understand and acknowledge the position which, in accordance with all established rules of scientific investigation, I am entitled to claim and, *de facto*, occupy with regard to the snake question.

My theory of the physiological action of snake poison covers the whole of the phenomena accompanying the poisoning process; it shows them all to emanate from the operation of one law, namely, that of reduced motor nerve force, and, according to the laws of scientific induction, it must be accepted as correct, until any single one of the phenomena it deals with is shown not to be explainable by it.

This simple task has, so far, not been accomplished by any one of my opponents, and the feeble attempt made by DR. REID in your issue of this month is limited to the extraordinary and startling assertion that other and higher than motor centres are affected by the snake poison. What these other and higher centres are, DR. REID does not state. Physiology knows but sensory and motor centres throughout the whole animal kingdom. If DR. REID has by some clairvoyant introversion discovered other and higher centres within his own cranium, it is his duty—as that of a scientific man—to enlighten our ignorance. From a purely physiological point of view there is no intrinsic difference between the motor centres propelling the faeces through the colon and rectum, and those that drive a train of thought through the brain.

DR. REID appears to consider experiments on animals absolutely necessary for me to establish my theory, but does not give his reasons for this demand. It is just because I have abstained as much as possible from these clumsy interrogations of nature, but confined my observations chiefly to human animals poisoned by snakes

and to a careful analysis of the symptoms they presented, it is for these reasons, principally, that I have succeeded where others failed, and that I decline to stultify myself by experiments, which are not only unnecessary, but, to my mind, at least, both cruel and cowardly.

To use a homely phrase, "The proof of the pudding is in the eating." Strychnine, by its immediate and brilliant action as an antidote, proves the correctness of the theory that led to its adoption.

It also proves that snake poison is merely *force destroying*, whilst the experiments recorded by me, show *the tissue changes the destruction of blood corpuscles* not to be the result of the direct action of the poison. DR. REID's memory is sadly defective when he alleges that my statement to that effect rests on evidence not named by me.

His naive trust in the *vis medicatrix naturæ*, and in Nature's sweet restorer, sleep, however applicable to merely worn out nerves, would be entirely misapplied to snake poisoned ones. It would, in fact, amount to malpractice, and, in his own case, to a genteel way of committing suicide, for sleep in snake poisoning is in nine cases out of ten the precursor of coma, paralysis and death.

Still more naive—as coming from an M.D.—is the fear he expresses of poisoning a snake-bitten person with strychnine, by producing a few harmless muscular twitchings that pass off quickly, and with the advent of which the drug is no longer required.

It would be useless and out of place in these columns to discuss what DR. REID is pleased to call the psychological element of my letter, beyond pointing out to him that animal magnetism does not belong to the domain of his *terra incognita*—psychology, but is a purely physical force. His contention, "that recent science has not shown any effect of animal magnetism in a person or animal that has lost the power of his higher mental faculties—in short, that has lost consciousness," and the next one, "that mesmerists always produce their wonderful effects short of absolute insensibility," would appear to indicate, however, that animal magnetism is also not altogether a *terra cognita* to DR. REID. The mesmeric coma is a state of absolute insensibility and unconsciousness, almost identical in appearance with the snakebite coma, yet easily removable by a few passes or the mere will of the operator. My explanation of the case of Lullahby is therefore perfectly tenable on perfectly known grounds, and DR. REID's quotation at the end of his letter as inappropriate as his allusions to spiritualism.

I am, Yours truly,

Yackandandah, Victoria,

A. MUELLER.

27th April, 1889.

#### —◆— THE INSANE POPULATION OF SOUTH AUSTRALIA IN 1888. ◆—

ON the 31st December, 1888, the number of insane persons in South Australia was 758—430 males and 328 females. The permanent addition to numbers as the result of the year's operation is 8; the previous year it was only 6. This increase is considerably below the usual average, which for the last twenty-four years amounts to 15.27 per cent. of admissions. If this average had been sustained the permanent increase for the two years would have been 57 instead of 14.

The proportion of registered insane to the estimated population of South Australia, on the 31st day of December, was 1 in 427. In England, on the 1st day of

January, 1887, it was 1 in 349. Compared with the colonies of Victoria and New South Wales the proportion per 1,000 of insane persons to the general population is: South Australia, 1888, 2·34 per 1,000; New South Wales, 1887, 2·71 per 1,000; Victoria, 1887, 3·39 per 1,000.

On December 31, 1887, there remained in the Adelaide and Parkside Asylums 750 patients, and 190 were admitted during the year 1888, making the total number treated 940; of these 73 recovered, 57 improved, 1 unimproved, 1 escaped, and 50 died, leaving 758 patients in the two asylums on December 31, 1888.

Of the 190 cases admitted during the year, only 31 were Australian born, 80 were English, 30 Irish, 25 German, and 12 Scotch.

As regards the causes of diseases of the 190 patients admitted during the year, 124 are stated as not known, 12 are ascribed to drink, 6 to bodily illness, 5 to masturbation, 5 to sunstroke, 4 to money matters, &c.

The expenditure for the year has been £21,674 19s. 8d. The daily rate per patient is 1s. 7d. as against 1s. 11½d. in 1885, and 1s. 9d. in 1886. Deducting the fees for maintenance received, amounting to £1,897 3s. 10d., the daily average cost for each patient is 1s. 5½d. as against 1s. 9½d. in 1885. In Victoria the weekly cost of maintenance for each patient is 11s. 5d.; in New South Wales, 11s. 11½d.; in South Australia, 11s. 1d.

## OBITUARY.

### CHARLES EMERSON TENNENT.

WE regret to have to record the death of Dr. C. E. Tennent (M.D. et Ch. D., Eclectic Medical Board, Canada) who died at Auckland on April 23, aged 57 years. The deceased gentleman arrived in New Zealand in 1875, and lived for some time in Hawke's Bay, where he practised his profession and joined the "F" battery of artillery as surgeon. He came to Auckland in 1879, and was transferred to the "A" battery with the rank of Staff surgeon. Amongst the other appointments which Dr. Tennent held in Auckland were those of Coroner, Medical Officer of the Lock Hospital when the C.D. Act was in force, and he was also medical officer for various friendly societies. About twelve months ago Dr. Tennent's health began to fail, and he retired from the more active duties of his profession. Symptoms of dropsy set in, and the fell disease, although its attacks were warded off repeatedly, could not be defeated. During his illness he was attended by Drs. Walker, Wine, and Girdler, and several operations had to be performed for his physical relief. Dr. Tennent leaves a widow and a grown up family of one son and three daughters. In consequence of his military appointment a military funeral was accorded to Dr. Tennent on April 24, and the interment took place at the New Anglican cemetery of St. John's, Tamaki. Dr. Tennent was the eldest son of Henry Tennent, of Demerara, and nephew of Sir James Emerson Tennent, Governor of Ceylon. He served as Surgeon in the Anglo-Chinese Field Force and

received the war medal. He was subsequently Surgeon-Superintendent of the Government Immigration Society at Park-street, Westminster; Surgeon of the West India and Pacific Mail Steamship Company; Medical Officer of the Seamen's Hospital, and Surgeon to the National Steam Navigation Company. Dr. Tennent also served in India during the Mutiny, and was present at both Delhi and Lucknow. Here he had his left elbow shattered. For his services on this occasion he received the Indian medal with clasps. He also served throughout the Chinese war in 1857, when he was shot through both his legs, and was invalided home to Europe the following year. For these services he was awarded the medal and Canton clasp. Dr. Tennent was also present at the first Burmese rebellion, took part in the capture of Pegu, was present at the capture of Bushire, and bombardment of Rusaunef, in the Persian Gulf.

## THE MONTH.

### NEW SOUTH WALES.

In the Legislative Council, on April 24, the Hon. Dr. R. S. Bowker introduced a Bill for the amendment of the laws respecting the medical profession, and for the establishment of a Medical Council.

The steamer "Guthrie," from Hongkong, with three cases of modified small-pox on board, arrived in Port Jackson on Saturday morning, April 13. The three patients, together with an attendant, were placed on the hospital ship "Faraway," whilst all the passengers were detained in quarantine for the usual period.

THE number of typhoid fever patients in the hospitals in and around Sydney on April 10 was 145. Of this number 50 were at the Coast Hospital, 49 at the Prince Alfred Hospital, 19 at the St. Vincent's Hospital, 17 at the Sydney Hospital, and 10 at the Glebe Children's Hospital.

THE Senate of the University of Sydney have accepted the offers from Mrs. Renwick (wife of the Hon. Dr. Renwick, Vice-Chancellor) and Dr. P. Sydney Jones to defray the cost of large stained-glass windows in the upper corridor of the new medical school building, and also from Dr. George Bennett offering a smaller stained-glass window for the lower corridor.

MR. GEORGE M'CULLOCH, of Mount Gipps station, has given £700 as a donation to pay for furnishing the Broken Hill Hospital. The committee, at a special meeting, resolved to acknowledge the munificent gift by naming the large surgical ward in the new hospital "The M'Culloch Ward."

At the Bathurst Circuit Court on April 17, before the Chief Justice and a jury of four, an action was commenced by Miss Davis, matron of the Orange Hospital, against Dr. Geo. Goode, claiming £1000 damages for libel in connection with Miss Davis' administration of that institution. The case was concluded on April 20, resulting in a verdict for plaintiff for £100.

The inquest on Lavinia Dines, who died in the Sydney Hospital, and is supposed to have been the victim of criminal malpractice, was concluded on April 13. The

jury, after a short retirement, returned a verdict to the effect that the deceased died of acute peritonitis; that her death was accelerated by taking pills prescribed by John Willis Smith and administered by Mrs. Smith. In reply to a question from the coroner, the jury, after several hours deliberation, stated that there was nothing to show how the peritonitis was brought about. They censured the Sydney hospital authorities for carelessness in connection with the *post-mortem* examination, as it was found that the uterus had been removed after death.

DR. CHISHOLM ROSS, Resident Medical Officer at the Gladesville Asylum, has been appointed, on the recommendation of Dr. F. N. Manning, Lecturer in Psychological Medicine at the Sydney University.

DRS. H. V. C. HINDER, A. E. Mills, J. W. Hester, and A. Henry, have been elected Resident Medical officers of the Prince Alfred Hospital, Sydney.

DR. R. J. ALLAN, late of Raymond Terrace, and formerly of St. Vincent's Hospital, has commenced practice at Ashfield, a suburb of Sydney.

DR. T. E. ATKINS has commenced practice at Balranald.

DR. N. P. ELLIOTT, late of Brunswick, near Melbourne, has commenced practice at William-street, Sydney, as a specialist for diseases of children.

STAFF-SURGEON OWEN SPENCER EVANS, of the Naval Brigade, has retired from the Service on his rank.

DR. T. C. FISHER, who filled the post of Resident Medical Officer at the Sydney Hospital for the past three years, was, on leaving the institution, presented by the resident medical staff and nurses with a handsome *souvenir* and address as a mark of their great esteem for him.

DR. JAMES GRAHAM, of Hyde Park-terrace, has been appointed an Honorary Assistant Physician to the Prince Alfred Hospital, Sydney.

DR. W. G. McCLURE, formerly of Invercargill (N. Z.), has settled at Hillgrove, the centre of a mining district, 22 miles from Armidale.

DR. RIVERS MEAD, late of Kaniva, Victoria, has settled at Bodalla, 212 miles S.W. of Sydney.

DR. J. B. MEREDITH has succeeded to the practice of DR. R. J. ALLAN at Raymond Terrace, 92 miles N.E. of Sydney.

DR. C. W. MORGAN has removed from Newcastle to East Maitland.

DR. E. H. B. NICKOLL, formerly of Romsey, Victoria, has succeeded to the practice of DR. SWANSTON at Mudgee.

DR. F. ANTILL POCKLEY, Lecturer on Ophthalmic Medicine and Surgery in the University of Sydney, and formerly Honorary Assistant Ophthalmic Surgeon to the Prince Alfred Hospital, has been appointed Honorary Ophthalmic Surgeon to the Hospital *vice* Mr. Evans resigned.

DR. G. SERGEANT, of Echuca, Victoria, has been appointed Medical Missionary to the Cameroongunga aboriginal mission station near Moama.

DR. W. G. Tayler, of Sydney, has been appointed to act as a Member of the Police Medical Board during the absence, on leave, of DR. MACLAURIN.

DR. T. H. TENNANT, of Tenterfield, has been appointed Acting Surgeon to the Tabulam Corps of partially paid Mounted Infantry.

#### NEW ZEALAND.

THE next Conference of the New Zealand Medical Association is to be held in Dunedin during March, 1890.

THE Dunedin Hospital Trustees, on the 3rd of April, adopted a lengthy minute prepared as a reply to Dr. Batchelor's address, referred to in our last issue. The members spoke very warmly on the subject, and emphasis was laid on the fact of the death-rate in the hospital being the lowest in the colony of any of the large hospitals.

IT was reported at a recent meeting of the Dunedin Hospital Trustees that £1000 had been promised as a subscription to provide a Nurses' Home. This is apart from £653 promised for a separate ward for women.

DR. J. EWART, late Resident Surgeon of the Timaru Hospital, has been appointed House Surgeon of the Wellington Hospital.

DR. FRED. TRUBY KING, House Surgeon of the Wellington Hospital, has been appointed to the charge of the Seacliff Lunatic Asylum, Dunedin.

#### QUEENSLAND.

A RESIDENT surgeon is required for the hospital for sick children, in Brisbane; salary £200 per annum, with board and residence. Full particulars as to duties can be obtained on application to Dr. Hill, 153 Wickham-terrace, Brisbane. Applications must be sent in not later than June 1.

DR. ALEXANDER JACK, a new arrival, has commenced practice at Mount Albion, a silver field in the north of Queensland.

DR. THOS. H. MORGAN has commenced practice at Gympie.

#### SOUTH AUSTRALIA.

FIFTEEN passengers, suffering from measles, were on board the R.M.S. "Orient," which arrived from England at the Semaphore on April 11. Two further cases were discovered by the health officer when he boarded the vessel. The whole of the patients, who are third-class passengers, had been effectively isolated on board ship, and only those whose destination is Adelaide have been sent to Torrens Island.

DR. W. B. AITKEN has resigned his position as House Surgeon of the Adelaide Hospital. The board, in accepting his resignation, made a highly complimentary reference to the services of Dr. Aitkin.

DR. G. P. ATKINS, on his leaving Port Lincoln, where he has been practising for the past five years, was presented with an address and a handsome gold lever watch bearing the following inscription:—"G. P. Atkins, M.D., from his Port Lincoln friends, 3rd April, 1889."

DR. H. R. H. PEARE has commenced practice at Kadina.

DR. J. B. KELLY WHITE has removed from Sedan to Renmark, Chaffey's irrigation colony in South Australia.

#### TASMANIA.

THE services of a medical practitioner are required for Mount Zeehan, on the West Coast of Tasmania; salary £400 per annum, outside practice allowed, for attending about 150 men, medicine included. Applications, with testimonials, will be received up till 21st May, by Mr. Thos. Anderson, Hon. Sec., Mount Zeehan.

## VICTORIA.

A COMBINED meeting of the members of the Medical Society of Victoria and the Victorian Branch of the British Medical Association was held at the Medical Hall, Albert-street, East Melbourne, on April 10, for the purpose of discussing the Bill to amend the Medical Practitioners Act of 1865. The principal amendment proposed is that dealing with unregistered practitioners. The present law provides penalties against persons taking any medical name and title, and implying that they are "registered medical practitioners." This leaves any persons free to practise so long as they state that they are not registered. The proposal is to omit the words "implying that he is a registered medical practitioner," and provides that any person may be prosecuted who assumes any medical name or title, and upon conviction before a Court of Petty Sessions be liable to a fine of £50. Any person may take proceedings, but in the event of no outside person doing so, it will be the duty of the medical council, to be appointed under the Act, to do so. It was urged that this step was taken in the interests of the public simply, as the medical profession rather benefits than otherwise from quacks, who make people so ill that they have to apply to a qualified man. It was resolved to take steps to have the Bill brought before Parliament as soon as possible.

In the Melbourne District Court on April 18, Dr. P. Moloney was proceeded against by the Central Board of Health under the Health Amendment Act for not reporting a case of typhoid which came within his notice. Mr. Duffy, who appeared for the defence, said the proceedings were taken under an Act that had only been very recently passed. In the case in question no attempt was made to conceal that the patient was suffering and ultimately died from typhoid, but Dr. Moloney was not aware that it was necessary to report the matter. He claimed that, as this was the first prosecution that had taken place, the charge should be withdrawn, which was agreed to by the counsel appearing for the prosecution who, at the same time, expressed the hope that the case would have the effect of impressing upon medical men their duties in such cases.

DURING the three weeks ended April 26, 799 cases of typhoid fever were reported to the Central Board of Health, of which 100 were fatal. During the same period there were 97 cases of diphtheria, 24 having proved fatal.

FROM December 1, 1888, to May 7, 1889, the number of cases of typhoid fever reported to the Central Board of Health has been 4,253, of which 436 have terminated fatally. The cases of diphtheria recorded during the same period were 477, with 156 deaths.

DR. PATRICK DOYLE, M.D. et Ch.M., Qu. Univ., Irel., 1870, M. D. (a.e.g.), N.Z., 1876, M.D. (a.e.g.) Melb., 1886, formerly of Christ Church, N.Z., died at his residence at Hawthorn, near Melbourne, on April 14, at the age of 41.

MR. ALEXANDER MCLEAN, M.B. et Ch.M., Aberd., 1882, who practised at Sale for the last seven years is dead.

DR. EUGENE ANDERSON, for the past two years Senior Resident Surgeon Women's Hospital, has succeeded to the practice of the late Dr. Doyle, at Burwood-road, Hawthorn, a suburb of Melbourne.

DR. F. O. BURNETT has commenced practice at Bairnsdale.

DR. J. T. CHAPMAN has removed from Drysdale to Portarlington, a watering place on the Coast of Port Phillip, 63 miles S.W. of Melbourne.

DR. ALEX. CORRY, late of Barry, near Cardiff, Eng., has commenced practice at Mount Egerton, a gold-mining township, 54 miles N.W. of Melbourne.

DR. U. A. DALY, of 132 Collins-street, W., Melbourne, has removed to Gisborne, on the Macedon River, 41 miles N.W. of Melbourne.

DR. JAS. EADIE, late of Sandhurst, has commenced practice at Seymour-road, Caulfield, a suburb of Melbourne.

DR. F. M. HARRICKS, of St. Kilda, has left for Europe, on a twelve months' trip.

DR. J. A. HAYDEN, formerly of Dimboola, has commenced practice at Foster, in Gippsland, 212 miles S.E. of Melbourne.

DR. HENRY LAWRENCE, late of Newtown, Hobart, and formerly of George Town, Cape of Good Hope, has commenced practice at Malvern, six miles S.E. of Melbourne.

DR. GEO. L. LAYCOCK, late of 12 Upper Berkeley-street, London, and formerly Honorary Physician to the Paddington-green Children's Hospital, and to the Hospital for Epilepsy and Paralysis, Regent's-park, London, has commenced practice at 77 Collins-street, East Melbourne.

DR. H. ST. J. MITCHELL, late Resident Surgeon of the Kyneton Hospital, has commenced practice at Toorak, a fashionable suburb of Melbourne.

DR. W. L. MULLEN has resigned his appointment as Junior Medical Officer of Hospitals for the Insane in Victoria.

DR. F. J. PACEY, a new arrival, has commenced practice at Geelong.

DR. J. WALLACE WATSON, late *locum tenens* for Dr. W. Warren, of Kew, near Melbourne, has removed to Sale, the principal town in Gippsland.

## MEDICAL APPOINTMENTS.

Brownrigg, Herbert Watson, L.K.Q.C.P. Irel., L.R.C.S. Irel., to be Government Medical Officer at Port Douglas, Qc., vice W. M. King, M.R.C.S.E., resigned.

Burnett, Francis A., M.B., to be Health Officer at Bairnsdale, Vic. Daly, Ullok Arthur, M.B. et Ch.B. Dubl., to be Public Vaccinator at Gisborne, Vic., vice Dr. G. H. Salter, resigned.

De Lantour, Bertrand Edgar, M.R.C.S.E., to be a Public Vaccinator for the district of Tapanui, N.Z.

Grant, Andrew, M.B. et Ch.M. Aberd., to be a Surgeon of the Victorian Rangers.

Hassell, Gray, M.B. et Ch.M., Aberd., to be Surgeon of H.M. Prisons at Wellington, N.Z., vice Dr. Alex. Johnston, resigned. Hayden, James Augustus, M.R.C.S.E., to be Public Vaccinator at Foster, Vic.

Lewers, Richardson Wakefield, M.B. et Ch.B. Melb., appointed Assistant Medical Officer Bendigo District Hospital, Sandhurst, Vic.

McClure, William George, M.D. Glas., M.R.C.S.E., to be Government Medical Officer and Vaccinator for the district of Hillgrove, N.S.W.

Macdonald, George Bothwell Douglas, M.B. et Ch.M. Aberd., to be Public Vaccinator at Tarnagulla, Vic. Meredith, John Baldwin, L.R.C.P. et R.C.S. Ed., L.F.P.S. Glas., to be Government Medical Officer and Public Vaccinator for the district of Raymond Terrace, N.S.W.

Moss, William Joseph Aileine, M.B. Melb., to be Health Officer for shire of Leigh, Vic.

Nickoll, Edward Harvey Bird, L.R.C.P. et R.C.S. Edin., to be Visiting Surgeon and Dispenser to Mudgee Gaol, N.S.W., vice Dr. Swanston, resigned.

Pears, Humphreys Robert Henry, L.K.Q.C.P. Irel., to be Public Vaccinator at Kadina, S.A.

Reid, James Alexander, M.D. et Ch.M. Aberd., to be Public Vaccinator for Stratford, Vic.

Reid, Robert George, L.R.C.P. & R.C.S. Ed., L.F.P.S. Glas., to be Health Officer for Goulburn shire, Vic.  
 Ross, Bernard Joseph, M.D., to be Health Officer for the Min-  
 hamite shire, Vic., vice Dr. W. S. R. Woodforde.  
 Wilkie, David William Balfour, M.B. Melb., M.R.C.S.E., to be  
 Government Medical Officer at Springsure, Qu.

## BIRTHS, MARRIAGES, AND DEATHS.

\*• The charge for inserting announcements of Births, Mar-  
 riages, and Deaths is 2s. 6d., which should be forwarded in stamps  
 with the announcement.

### BIRTHS.

CAMPBELL.—On the 4th April, at Moonee Ponds, near Mel-  
 bourne, the wife of J. Campbell, M.D., of a son.  
 CLAY.—At Rockdale, near Sydney, on April 26, the wife of Dr. W.  
 R. Clay of a son.  
 COLQUHOUN.—On the 13th April, at Sandhurst, Victoria, the  
 wife of Dr. A. Colquhoun, of a daughter.  
 DAISS.—On the 26th April, at South Melbourne, the wife of Dr.  
 Dai'sh of a son.  
 JAKINS.—On the 8th April, the wife of W. V. Jakins, physician,  
 Collins-street East, Melbourne, of a daughter.  
 SKINNER.—On the 31st March, at Beechworth, Victoria, the wife  
 of Dr. Skinner of a daughter.  
 VANCE.—On the 6th April, at Bacchus Marsh, Victoria, the  
 wife of Dr. Noel Vance of a son.  
 WHITTAKER.—On the 29th March, at North Melbourne, the  
 wife of J. Whitaker, M.D., of a daughter.

### MARRIAGES.

FINLAY—ALEXANDER.—On April 10th, at Wollahra, Sydney,  
 by the Rev. Dr. Gilchrist, William Finlay, M.D., Bathurst, to Lena  
 Margaretta, eldest daughter of James Lyon Alexander, Sydney.  
 HEWER—COOPER.—On the 2nd April, at the Queensland  
 National Bank, Barcaldine, Queensland, by the Rev. Lester  
 Lester, Henry John Hower, M.R.C.S., &c., to Agnes, fifth  
 daughter of George Cooper, of Brisbane.  
 MAHER—KEENAN.—On the 30th April, at the Church of the  
 Sacred Heart, St. Kilda, Melbourne, William Odillo Maher,  
 M.D., M.R.C.S. Eng., Sydney, to Alicia Marguerite, second  
 daughter of the late James Keenan, C.E.  
 SCHLESINGER—STOKES.—On the 29th April, at All Saints'  
 Church, East St. Kilda, R. H. Schlesinger, M.B., C.M., Edin;  
 M.R.C.S., Eng., of St. Kilda, near Melbourne, to Ellen Bertha,  
 third daughter of W. A. Stokes, late of Geelong.  
 TRAYERS—REID.—On the 30th April, at All Saints' Church, East  
 St. Kilda, Melbourne, Dr. Geoffrey Travers, to Ida, second  
 daughter of R. D. Reid, Armidale.  
 TODD—BACKHOUSE.—May 1, at St. Peter's College Chapel,  
 Adelaide, Charles Edward Todd, M.D., to Elsie Beatrice, fourth  
 daughter of Benjamin Backhouse, of Sydney.

### DEATHS.

BORTHWICK.—On the 20th April, at Kensington, near Adelaide,  
 Mary, wife of Thomas Borthwick, M.B., aged 29 years.  
 VAUSE.—May 4, 1889, at Manly, near Sydney, Ida Emily, wife of  
 Dr. A. J. Vause, of Bay View House, Cook's River, N.S.W., in her  
 36th year.

## PUBLICATIONS RECEIVED.

*Some Remarks on the Summer Gastro-Intestinal Dis-  
 eases of Childhood.* By J. H. Musser, M.D. (reprint),  
 Detroit, Mich.: G. S. Davis, 1886.  
*Peri-Cæcal Inflammation.* Reprint. Philadelphia:  
 Wm. J. Dornan, 1888.  
*Two Cases of Malignant Endocarditis.* By J. H.  
 Musser, M.D. Reprint.  
*Notes of a Case of Raynaud's Disease.* By J. H.  
 Musser, M.D. Reprint. Philadelphia: Wm. J. Dor-  
 nan, 1886.  
*The Annual Report of the Health of the Imperial Navy*  
 (Japan) for the 20th year of Meiji (1887).  
*The Catalogue of the Tokyo Medical Library,* Tokyo,  
 1888.  
*Mayor's Report (1887-88)* of town of Kensington and  
 Norwood, delivered 26th November, 1888. Ade-  
 laide: Vardon and Pritchard.  
*The Art of Dispensing.* Second edition, 1888. Pub-  
 lished at the offices of the *Chemist and Druggist*,  
 London and Melbourne.  
*Handbook of Medicine Stamp Duty,* with the Statutes  
 and Appendices. By E. N. Alpe, of the Middle  
 Temple and the Inland Revenue Department. Pub-  
 lished at the offices of the *Chemist and Druggist*,  
 London and Melbourne.  
*Select Extra-tropical plants, readily eligible for Indus-  
 trial Culture or Naturalisation.* By Baron Ferd.  
 Von Mueller, K.C.M.G., M.D. &c., Government  
 Botanist for Victoria, 7th ed., Melbourne: Robt. S.  
 Brain, Government Printer, 1888.  
*The Skin Diseases of Infancy and Early Life.* By  
 C. M. Campbell, M.D., C.M., Edin., etc. London:  
 Baillière, Tindall and Cox, 1889.  
*The A.B.C. Medical Diary and Visiting List,* 1889.  
 London: Burroughs, Wellcome and Co.  
*Key to the System of Victorian Plants,* two parts. By  
 Baron Ferd. Von Mueller, K.C.M.G., &c., 1887, 1888:  
 Robert S. Brain, Government Printer, Melbourne.  
*The Causation of Disease: An Exposition of the Ulti-  
 mate Factors which induce it.* By Harry Campbell,  
 M.D., B.S. London: H. K. Lewis, 1889.  
*Recreations of an Australian Surgeon.* By Samuel T.  
 Knaggs, M.D., F.R.C.S.I. Sydney: W. M. MacLardy,  
 1888.  
*Congestive Neurasthenia; or, Insomnia and Nerve De-  
 pression.* By E. G. Whittle, M.D., Lond., F.R.C.S.,  
 Eng. London: H. K. Lewis, 1889.

## STATISTICS OF AUSTRALASIAN COLONIES FOR 1888.

Colony.	Estimated Population.	Marriages.	Births.	Deaths.	Per 1000 of the Population—		
					Marriages.	Births.	Deaths.
New South Wales ... ..	1,085,356	7,844	38,505	14,407	7.37	36.18	13.54
Queensland ... ..	387,463	3,254	14,247	5,529	8.63	37.77	14.66
South Australia ... ..	313,065	2,084	10,510	3,759	6.61	33.34	11.92
Victoria ... ..	1,090,869	8,530	34,503	16,287	8.03	32.49	15.34
Western Australia ... ..	42,137	304	1,518	673	7.18	35.88	15.91
Total ... ..	2,918,890	22,016	99,283	40,655	7.70	34.70	14.21
Tasmania ... ..	146,149	952	4,777	2,036	6.60	33.10	14.11
New Zealand ... ..	607,380	3,616	18,902	5,708	5.97	31.22	9.43
Grand Total ... ..	3,672,419	26,584	122,962	48,399	7.36	34.06	13.40

## REPORTED MORTALITY FOR THE MONTH OF MARCH, 1889.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Group and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
<b>N. S. WALES.</b>														
Sydney .....	132,846	289	150	80	...	...	4	3	5	16	8	4	2	1
Suburbs .....	215,849	845	376	211	..	...	16	...	26	28	22	12	8	6
<b>NEW ZEALAND.</b>														
Auckland .....	35,858	84	46	22	...	...	...	...	2	10	5	4	1	...
Christchurch .....	16,455	31	26	13	...	...	4	...	1	8	...	2	1	...
Dunedin .....	23,546	42	25	16	...	...	...	...	...	8	1	2	...	...
Wellington .....	29,075	92	50	30	...	...	...	...	2	16	4	2	2	...
<b>QUEENSLAND.</b>														
Brisbane .....	51,689	185	89	44	}	...	1	2	14	15	12	5	1	1
Suburbs .....	21,960	130	48	84										
<b>SOUTH AUSTRALIA</b> .....	313,395	926	311	112	...	...	14	...	15	27	34	20	12	6
Adelaide .....	43,750	84	56	14	...	...	2	...	3	3	10	3	4	1
<b>TASMANIA.</b>														
Hobart .....	34,485	86	71	19	...	...	...	...	7	5	1	3	2	2
Launceston .....	21,201	59	37	11	...	...	1	...	6	1	1	...	...	...
Country Districts .....	90,972	239	88	...	...	...	...	...	8	12	...	...	...	...
<b>VICTORIA.</b>														
Melbourne .....	75,400	129	126	404	2	...	22	7	91	61	69	46	32	4
Suburbs .....	362,385	1,329	814											

## METEOROLOGICAL OBSERVATIONS FOR MARCH, 1889.

STATIONS.	THERMOMETER.					Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.			Depth.	Days.		
							Inches			
Adelaide—Lat. 34° 55' 33" S.; Long. 138° 36' E. ....	...	102	70.9	49.6	29.964	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S.; Long. 174° 49' 2" E. ....	142	79	64.2	46	...	...	0.700	7	76	...
Brisbane—Lat. 27° 28' 3" S.; Long. 153° 16' 15" E. ....	156	91.5	74.6	61.8	30.065	...	4.288	19	73	S.E.
Christchurch—Lat. 43° 32' 16" S.; Long. 172° 38' 59" E. ....	164.4	88.6	60.3	36.8	...	...	4.188	12	58	...
Dunedin—Lat. 45° 52' 11" S.; Long. 170° 31' 11" E. ....	139	80	55	38	...	...	2.424	11	75	...
Hobart—Lat. 42° 53' 32" S.; Long. 147° 22' 20" E. ....	...	89	60.1	42.2	29.991	...	0.72	12	66	...
Launceston—Lat. 41° 30' S.; Long. 147° 14' E. ....	...	83.6	62.7	36.5	30.069	...	0.77	8	61	...
Melbourne—Lat. 37° 49' 54" S.; Long. 144° 58' 42" E. ....	...	96	64.3	48	30.015	...	0.237	5	...	...
Sydney—Lat. 33° 51' 41" S.; Long. 151° 11' 49" E. ....	...	91.5	69.9	59.2	30.116	...	1.13	15	64	N.E.
Wellington—Lat. 41° 16' 25" S.; Long. 174° 47' 25" E. ....	131	78	59.2	43.2	...	...	3.970	12	73	...

# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### OBSERVATIONS ON THE PRACTICE OF CYSTOTOMY.

READ BEFORE THE SURGICAL SECTION AT THE INTER-COLONIAL MEDICAL CONGRESS IN MELBOURNE ON JANUARY 9TH, 1889.

By ALEX. MACCORMICK, M.D. ET CH.M. EDIN., M.R.C.S. (ENG.), HON SURGEON, PRINCE ALFRED HOSPITAL, SYDNEY.

I MAY state at the outset that I use the term cystotomy in its widest acceptation, that is, as section of the bladder for any purpose whatever, whether for exploration or drainage or for the removal of stone, tumour or foreign body. And I purposely avoid the use of the time honoured term, lithotomy, as a misnomer, for we do not cut the stone, we cut the soft parts and remove the stone. I venture to plead for greater accuracy in our terminology.

Some justification for attempting a more accurate use of terms is, I think, to be found in the fact that, with an increased variety of operative procedures in connection with the urinary organs, there has arisen a necessity both for general terms to express the broader, and special terms to express the more particular features of such operations. Now cystotomy is manifestly a good general term hitherto unwarrantably restricted in its interpretation, while lithotomy, though sacred by usage, is, as I have said, a misnomer, and does not express the special features of any operation.

I may venture to indicate how I think consistency and utility in nomenclature might well be attained.

I think the term cystotomy ought to be used as a general term as I have above defined it, while if a special term to signify cutting for stone be required, the term lithectomy would be preferable. Lithectomy could then be further specialised as cysto-lithectomy and nephro-lithectomy, according to the site of the calculus, or, according to the site of the operation, as supra-pubic cysto-lithectomy, median perineal cysto-lithectomy and lateral perineal cysto-lithectomy.

In taking as the subject for my paper the practice of cystotomy in its wider sense, I make no pretence of treating it exhaustively. Its scope is too wide to be adequately treated in any single paper such as this. At first, indeed, it was my intention to take up the subject of supra-pubic cystotomy alone, but, at the request of our Secretary, I have included some remarks upon the subject of cystotomy in general.

Few of its departments are better fitted to exhibit the advance of the science and art of surgery than the surgery of the bladder. It is not here chiefly that the triumphs of antiseptic surgery are so marked, though, no doubt, it has contributed largely to the result; but, independently of antiseptics altogether, there has been a widening of the area, so to speak, of surgical interference, and an ever increasing variety of procedure.

I shall avoid long tables of statistics and will try, as much as possible, to base my preference for the adoption of any operative method upon anatomical and physiological grounds.

#### VARIETIES OF THE OPERATION.

If we look at a vertical mesial section of the body it immediately becomes manifest that there are two safe routes into the bladder, one above the pubis and the other below, through the perineum, or through the rectum in the male, or the vagina in the female. By *safe* I mean securing access to the interior of the organ without passing through the peritoneum. The rectal operation has been given up by surgeons of the present day on account of the persistence of fistula afterwards in a great many cases, although plenty of room is gained by this method.

Of vaginal cystotomy I shall not here speak.

Practically, there are only three operations now practised on the male to obtain access to the interior of the bladder,

1. Supra-pubic.
2. Lateral Perineal.
3. Median Perineal.

I think these three operations with a little modification, according to circumstances, will meet all requirements. The median operation, as practised at the present day, is more an external urethrotomy than a cystotomy, as the bladder itself is not incised.

#### CHOICE OF OPERATION.

It is an exceedingly difficult matter to lay down definite rules for the choice of an operation in any case of bladder trouble where cystotomy has been decided upon. Many operators have a favourite method to which they will submit all patients, but this is not fair to the patient, nor is it fair to the method selected, for each operation has some special advantages and special disadvantages, according to circumstances.

#### SUPRA-PUBIC CYSTOTOMY.

The position of the wound in this operation is said to be a faulty one, from the point of view of general surgical principles, on account of the bad position for drainage, but this is the worst that

can be said of it. To show that the track of the wound is limited by fasciæ, though not so effectually as in the low operation, I shall refer to the arrangement of the transversalis fasciæ in the front wall of the abdomen to which Brauné, in his atlas of topographical anatomy, has drawn particular attention. He shows that the transversalis fasciæ, opposite the semi-lunar fold of Douglas, splits into two layers—an anterior and a posterior. (See also Liverpool *Medical Clinical Journal*, January, 1885.) The anterior layer passes down behind the rectus abdominis and is attached to the upper border of the pubis towards its posterior aspect. The posterior layer, when traced downwards, is seen to be carried to the superior aspect of the bladder by the urachus, and becomes continuous with the recto-vesical fasciæ and the capsule of the prostate. Of the correctness of the above description I have satisfied myself by careful dissection. These two layers of fasciæ enclose a space which is called the *Porta Vesicæ* of Retzius, or the pre-vesical space, and it is into this space and not into the sub-peritoneal space that the bladder rises when distended. In the operation of supra-pubic cystotomy it is this space that is entered, and here the bladder can be opened to a considerable extent in the middle line without the operator running any risk of wounding the peritoneum, or even of opening the sub-peritoneal space, so long as the incision is confined to the middle line and does not extend backwards beyond the urachus.

I may mention here an interesting fact pointed out by Mr. Harrison, viz.:—"When there is a fracture of the pelvis, with extra peritoneal rupture of the bladder by a fractured pubic ramus, it is evident that the urine will be discharged into the pre-vesical space; and, supposing the bladder to be drained by a perineal incision, this incision will be very unlikely to drain the space of its contained urine which will remain mixed with blood and in contact with the fractured bone." ("Surgical disorders of the Urinary Organs," p. 28.) Dr. Weir, of New York, reports a case illustrative of this, where he drained the bladder through the perineum after making an incision above the pubis. (*New York Medical Record*, March 29th, 1884.)

#### MODE OF PERFORMING THE OPERATION ON THE ADULT.

The hair having been shaved off the pubes and the skin rendered aseptic, anæsthesia is pushed to complete relaxation. Then a red rubber catheter is introduced into the bladder and the urine drawn off. The bladder is now to be gently distended with a solution of boro-glyceride (1 in

40). If fermentation is going on in the bladder it ought to be gently washed out with boro-glyceride solution before finally injecting it. The quantity to be injected should be between nine and ten ounces for an adult, and from half-ounce to two or three ounces for a child, according to the age. In distending the viscus I prefer Thompson's bladder syringe to any other on account of the exact way in which you can gauge the amount of resistance. The catheter having been removed the penis is tied with a small piece of elastic tubing. A rectal bag should then be greased and introduced into the rectum just beyond the internal sphincter and then distended with warm water (ten or twelve ounces). An incision of sufficient length according to circumstances is made in the middle line in front, stopping at the symphysis pubis. The thin pale line corresponding to the linea alba is then looked for, and the incision deepened along this line between the edges of the recti with as little tearing as possible. The edges of the recti being gently held asunder by retractors, the anterior layer of the transversalis fasciæ is exposed and should be pinched up with forceps near the lower end of the wound and incised, and then the deposit of fat in the pre-vesical space will be exposed. Next, by means of the left index finger, with the pulp uppermost, the fat and the reflection of the peritoneum should be pushed upwards, out of the way. A sharp hook or a loop of silk should be made to fix the bladder to the anterior wall of the abdomen in the upper part of the incision. Then an incision is made into the bladder large enough to admit the index finger with which to examine the interior of the organ, and to judge of the requisite length of incision in the bladder wall that may be necessary. Here I think it is of the greatest importance to disturb the tissues in front of the bladder as little as possible. The soft tissues behind the pubes should not be interfered with, and, above all, the bladder should not, when it collapses, be pushed before the examining finger and its fascial connections disturbed, because if this be done, it is evident that the chances of extravasation will be much increased as the two layers of the transversalis fasciæ will be extensively separated. If the cystotomy is being done for stone this can be placed in the most favourable position and removed with a pair of forceps; great care should be taken not to injure the bladder wall or to bruise or tear the edges of the bladder wound—it is always better to enlarge the wound with the knife than to tear it with the finger. The most suitable kind of forceps are a pair of "lithotomy forceps" with a lock like midwifery forceps, and the blades should be applied in the same way as in obstetric practice, taking



great care not to include the wall of the bladder. The parts should be then well washed with boro-glyceride solution.

The question now arises as to whether the bladder wound should or should not be sutured. I think everyone will agree to suture the bladder if the urine and viscus itself be fairly healthy. The best suture to use is fine catgut, and the best method of suturing is Gussenbauer's or Lembert's. The sutures should be placed close together. The superficial wound is then closed and a drain put in the lower part of the wound down to the bladder wall. It is very difficult to sew up an extra peritoneal wound or rupture of the bladder so as to render it watertight. In an intra-peritoneal wound or rupture the smooth serous surfaces can be brought so accurately together as to render the wall of the bladder perfectly watertight, but in the former case it is much safer to provide a good drain for any urine that may leak through. In any case where the bladder wound is at all large I think it is good practice to suture it carefully, and, if the mucous membrane be unhealthy or fermentation is going on in the urine, to leave room for a drainage tube at the lower end of the wound. A catheter in the urethra, unless in an exceptionally tolerant subject, is not advisable. In the case of adults with very unhealthy urine I should be inclined to use a method described by Dr. Keyes, of New York, for draining the bladder through the perineum. (*Journal of Cutaneous and Genito-urinary Diseases*, July, 1887, New York.) He uses a large red rubber catheter and passes through its lumen a piece of twine, bringing it out at the eye, and then with a needle he passes the twine in through the eye again and out through the point of the catheter until a knot, previously placed on it, catches. The part of the twine hanging from the tip is then threaded into the eye of a silver probe which is turned up at the point. Then, as in the operation for median cystotomy, the membranous part of the urethra is incised, making just enough room for the catheter to be drawn through. The probe is pushed through the incision along the knife into the groove of the staff in the membranous part of the urethra and then into the bladder, and is caught through the suprapubic incision, and by the aid of the string the catheter is pulled into the bladder, the string is cut short and withdrawn, when the catheter can be fixed at the proper length inside the bladder.

I have performed the supra-pubic operation four times within the last two years. The first case was that of a boy seven years of age, on whom I performed the lateral perineal operation on December 23rd, 1886. On making the usual incision and passing the finger into the

bladder I found a stone, very rough, and, as I consider, very large for a boy of his age. On passing the forceps I had no difficulty in seizing the stone, but I judged from the position of the handles, that the blades were separated to such an extent as to be likely to cause a great deal of tearing if extraction were attempted, therefore I considered it safer to withdraw the forceps. I had then to choose between crushing the stone or removing it above the pubis. I decided on the latter method. I got one of my colleagues to pass the index finger of the right hand into the bladder through the lateral incision, and with it to push the anterior wall of the viscus up behind the pubes against the lower part of the rectus muscle, so as to push the anterior wall of the bladder up into the prevesical space. I then made an incision as for supra-pubic cystotomy. I did not see the peritoneum at all, and I found the finger a most convenient and effective guide. On opening the bladder I kept it forward with blunt hooks. The stone was removed, the forceps being much aided by the finger in the bladder. I sutured the bladder carefully with catgut, put a drain in the lower part of the abdominal wound, and left it in for forty-eight hours, the bladder being drained through the perineal incision. The abdominal wound healed by first intention, and the patient made an uninterrupted recovery.

In young or thin people where, for some reason, after the lateral or median perineal operation, it is deemed necessary to open the bladder above the pubes, the finger of an assistant acts as an admirable guide, and by judicious pressure on the anterior wall of the bladder he can push it up into the prevesical space as readily and effectively as if the bladder and rectum were distended.

My three remaining cases were those of children of one and one-sixth, two, and two-and-a-half years respectively. In these three cases the operative procedure was the same, and the supra-pubic method was chosen in the first case on account of the youth of the patient, and in the second and third cases on account of the size of the stone, which was first measured bi-manually with one finger in the rectum and the other on the front wall of the abdomen. The bladder in the first case was injected with about one ounce of fluid, in the second and third with two ounces. The bladder wall was not sutured. A drainage tube was used in the superficial part of the wound only, and the upper part of the abdominal wall was sutured. The drainage tube was always removed in forty-eight hours, and in the first case, although urine trickled along the drainage track for the first two days, it did not prevent union by first intention in the greater part of the

wound, which was completely healed in ten days. In the other two cases the wounds healed in twenty-one and eighteen days respectively. In neither of these cases did I use a rectal tampon, but instead I got an assistant to push the bladder upwards and forwards gently with his right index finger in the rectum. In the case of children I consider it is quite unnecessary to use rectal distension, as it is more likely to cause injury to the rectum, and it may even thrust the bladder to one side and the rectum itself thus present in the abdominal wound; and, furthermore, the finger can give the operator great assistance in the removal of the stone by making pressure from below. (*Vide Deutsche Zeitschrift für Chirurg.* Bd. 28th, 1 and 2 Hft.)

I have made reference to the use of the bimanual (or recto-abdominal) examination, under deep anæsthesia, in the diagnosis of stone, especially in children. This method of examination has not hitherto received sufficient recognition in the literature of the subject. I have been in the habit of practising it for several years with the greatest advantage. Thus I have been enabled to detect a calculus not bigger than a split pea in the bladder of a child of fourteen months, upon whom I was unable to pass the smallest sound. Another great advantage of this method is the information which it elicits as to the shape and dimensions of the stone.

#### INDICATIONS FOR SUPRA-PUBIC CYSTOTOMY:

1. For stone in very young children.

I think the suprapubic method is the best operation in very young children. I advocate it on two grounds as being (a), the best operation anatomically, and (b) the safest.

(a) In regard to the anatomy of the bladder in the child, I think there is a field open for further investigation. The best description of it that I have found is in Dr. Symington's "Atlas of the Anatomy of the Child."

Fig. 1. (After Symington) is a vertical-mesial section of a male child at birth, and the amount of urine in the bladder was estimated at 1. drm. The orifice of the urethra in this case was at about the level of the upper border of the pubic symphysis. In front the bladder extended forwards and upwards in contact with the symphysis and the anterior abdominal wall against which it lay, until within one cm. of the umbilicus. The anterior surface of the bladder was entirely uncovered by peritoneum, and there was no tendency to the formation of a peritoneal pouch between the bladder and the anterior abdominal wall. Posteriorly the peritoneum reached as low as the level of the urethral orifice.

In all the sections of a child at this age, the orifice of the urethra was at the level of the upper

border of the pubic symphysis. Whether the bladder was empty or distended, its anterior surface always lay in close contact with the anterior abdominal wall, this relation corresponding more than in the adult, with its tubular developmental character. The anterior surface was entirely uncovered by peritoneum and was of a triangular shape, the base of the triangle being at the pubes, the apex towards the umbilicus, and the lateral boundaries corresponding to the hypogastric arteries. The bladder in all cases lay in contact with the lower two-thirds of that part of the anterior abdominal wall between the umbilicus and the symphysis pubes.

Fig. 2. In a section of the body of an infant  $3\frac{1}{2}$  months old, he found that the uncovered part of the bladder corresponded to about a quarter of the distance between the umbilicus and the pubes, with the bladder empty. In an infant 7 months old, where the bladder contained 1 oz. of urine, the uncovered part of the bladder occupied nearly half the distance between the umbilicus and the symphysis.

In boys of from 4 to 6 years he found that when the bladder was empty, its relations to the peritoneum differed in the contracted and relaxed conditions. When contracted and empty, the peritoneum came down behind the symphysis. When relaxed and empty, the membrane was reflected on the bladder above the symphysis.

When distended with from 2 to 3 oz., the distance between the reflection of the peritoneum and the symphysis was over 2 cm.

From a perusal of these facts it will be seen that in the child the peritoneum covers the bladder more extensively towards its base than in the adult, and, therefore, the distance between the base of the prostate and the reflection of the peritoneum is relatively less. The facts also make clear the relation of the anterior surface of the bladder to the anterior wall of the abdomen and to the peritoneum. Another very important point in the sections displayed is the small capacity of the infantile bladder. In an infant 7 months old, the bladder was pretty fully distended when it contained only 1 oz. of urine. (Fig. 3.)

In Holmes' "System of Surgery," Sir Henry Thompson says that the most frequent cause of death in children after lateral perineal cystotomy is peritonitis, due presumably to injury to the peritoneum during extraction. Now I hold that this would be much less likely to happen in the supra-pubic operation.

(b) If we look at the statistics given by Sir William MacCormac, and published in the *British Medical Journal* of March 19th, 1887, where he collected all the cases of supra-pubic

cystotomy he could find in London and the Provinces from January 1885 up to that date, we find 33 cases of this operation in children under 15 years of age with no death; in Mr. Twynam's paper in the October number of the *Australasian Medical Gazette* last year, we find a list of 28 cases of 15 years and under with one death. Assendelft has done the high or supra-pubic operation 102 times with two deaths.

If we compare these statistics with the statistics of the lateral operation as given in Holmes' "System of Surgery," we find that for children 16 years and under, the death rate is about one in 16. So that, judging from these statistics, the high operation is much the safer one in young children.

Still, I would not advocate its performance in all cases of children under 15, because after 5 years of age with a small stone I do not know of any easier or more rational operation than the lateral. But if the stone be of such a size as to require a large incision into the parts at the base of the bladder, and any roughness in handling, I think the supra-pubic route the safer. The size of the stone at this period of life can be very easily determined by the bi-manual examination, and then the operator should weigh in his mind the difficulties and give the benefit of the doubt in favour of the supra-pubic.

Up to December 1886, I had not thought much about supra-pubic cystotomy in children, and I was always in the habit of doing the lateral operation; the results were always favourable, and beyond a little delay in getting into the bladder of a fat child of two years of age, I never had any difficulty or complication, but I am sure that one not practised in the lateral perineal operation, and who practises antiseptics carefully, can more easily and safely gain access to the bladder above the pubis than below, in children of five years and under. I know of several (unpublished) cases below this age in which the perineal operation had to be abandoned, and a still greater number of cases in which considerable difficulty was experienced and time spent before the interior of the bladder was reached. Passing over the difficulties and complications that may occur during and immediately after either operation, we must not forget the after effects of the two operations. In the high operation the only bad after effects that may occur in children are a tendency to hernia and the possibility of a fistulous opening, both of which chances are very remote. But after the perineal operation there are the chances (1) of incontinence of urine: I have seen several cases of this, and I think it is always due to an overstretching of the sphincter vesicæ from an insufficient incision: (2) of

Impotence: (3) of Sterility: (4) of Fistula. I would, accordingly, advocate the suprapubic operation for stone in all children under five or six years of age. Between six and sixteen I should be less decided in my choice, but should, if the stone were of a considerable size, prefer the supra-pubic. I think, however, that it would be much better to perform litholapaxy for small stones in children if one had suitable instruments, but I would limit this operation to very small stones.

## 2. For large stone in adults.

No one will dispute the great advantage and safety of the high operation over any other method in cases of very large calculi in the adult, neither will anyone dispute the advantages of the lateral perineal in any case of small stone where a cutting operation is decided upon. But in this field of practice litholapaxy has come to rival the lateral perineal so much that, according to Sir Henry Thompson, all calculi that cannot be crushed ought to be too large to be safely removed by the perineal route, and, therefore, ought to be removed by the supra-pubic route. He even states that the high operation is, in his opinion, preferable to crushing, for calculi which, though not of the largest size, are extremely hard.

Most surgeons have not the dexterity in crushing that Sir Henry Thompson has acquired, and, although most men can crush a small stone with perfect safety, I have seen very disastrous results at the hands of very good operators in attempting to crush a large stone. According to Sir Henry Thompson's dictum, a stone is small, medium-sized, or large. A medium-sized stone is one which measures about 1 inch in each of two of its smallest diameters; anything below this is a small stone, and anything much above it is a large stone. Any calculus one inch or less in its two smallest diameters no one would hesitate to crush, but stones above this, except in the hands of very good manipulators with the lithotrite, would be more safely removed by a cutting operation. The prostatic urethra itself can be dilated to nearly 1 inch without much risk of injury, and the incision of the prostate would give three-quarters of an inch more room, so that a stone  $1\frac{1}{4}$  inch in each of two of its smallest diameters could be removed by the lateral perineal route without any tearing of parts, so that I still hold that, in the hands of judicious operators, the lateral operation ought to retain a place. Sometimes, in cases of small stone, it may be desirable to perform cystotomy, as in patients of a phosphatic diathesis with intense purulent cystitis, so as to allow the bladder rest by a thorough drainage for a few days. Such cases are better treated by a lateral perineal cystotomy.

### 3. For tumour of the bladder.

In cases of tumour of the bladder supra-pubic cystotomy has achieved very wonderful results, but as there is generally a very considerable amount of doubt in those cases as to the nature and attachments of the growth, a median perineal cystotomy in the first instance would clear up all doubt, provide a good drain, and in no way interfere with the subsequent supra-pubic cystotomy if the case could not be dealt with through the perineal opening. Here Thompson's sound will be of greatest advantage as a guide to the high incision, and to push up the bladder wall.

### 4. For enlarged prostate with chronic cystitis.

Supra-pubic cystotomy has been performed by Thompson and others in cases of enlarged prostate with chronic cystitis where instrumentation had become very troublesome. By McGill, of Leeds, it has been performed with the object of removing portions of the enlarged prostate. He reports three cases in which the results were very satisfactory. When cystotomy is performed to provide for a permanent drain, I think most surgeons would prefer, when possible, to drain through the perineum, when, if necessary, portions of the prostate could be removed.

5. For foreign body of an irregular shape that cannot be broken up or extracted by a lithotrite.

6. Cases of impassable stricture for catheterisation from within. (*B.M.J.*, 1., 84).

7. In cases of ankylosed hip joint.

8. In deformed pelvis from rickets.

9. For some cases of encysted stone.

10. In cases of Pyonephrosis where there is doubt as to which kidney is diseased, this operation might be performed, as a preliminary in order to decide which ureter was discharging pus or blood, before any more heroic procedure in the way of neophrotomy or nephrectomy should be decided on. In some such cases, of course, the endoscope might render exploratory cystotomy unnecessary, but in other cases the amount of pus or blood might obscure the examination by that instrument.

### MEDIAN PERINEAL CYSTOTOMY.

This operation in the adult is the easiest and safest route to the interior of the male bladder, but it has the great disadvantage of giving only a small opening. I will describe the operation as I practise it. The patient, having been anaesthetised and a median staff passed, is placed in the lithotomy position. The staff being held by an assistant, the surgeon passes the forefinger of the left hand into the rectum and places its tip with the pulp upwards where the staff enters the apex of the prostate, so that he can feel the groove through the intervening tissues. Then, taking a long narrow bistoury in the right hand, he plunges

the knife, with the back downwards, into the tissues of the perineum half-an-inch in front of the anus, through the raphe, and exactly in the middle line. With the finger in the rectum he avoids wounding the viscus and guides the knife into the groove of the staff at the apex of the prostate, and, with a sawing motion, incises the floor of the membranous urethra for fully half-an-inch close to the apex of the prostate. The knife is then withdrawn, and at the same time is made to cut upwards to give sufficient room, avoiding the bulb if possible, so as to lessen the amount of hæmorrhage. A Wheelhouse's gorget passed into the groove of the staff is guided by it into the bladder, and over this the left index finger of the operator can easily enter the bladder under ordinary circumstances. By making bi-manual examination the whole of the inner wall of the bladder can be brought into contact with the examining finger.

Dolbeau, who made careful dilatations of the prostate and neck of the bladder experimentally with a dilator, has shown that the neck of the bladder cannot be distended to a diameter greater than twenty to twenty-four millimetres, without producing lesions of it and of the prostate, so that no stone more than four-fifths of an inch in diameter can be removed by forceps without laceration. ("Ashurst's International Cyclopædia of Surgery," Vol. vi, p. 258.)

The great field for this operation, however, is not for the removal of calculi, but for the purpose of exploring and draining the bladder. Considered from an anatomical point of view it is perfectly correct, it cuts no important structure, there is no hæmorrhage if the incision is not made to wound the bulb, and the drainage is perfect. This operation is very useful as a preliminary to any of the other operations in any doubtful case of bladder trouble. I have pointed out above its advantages as a preliminary to the supra-pubic. Mr. Harrison, in his book of surgical disorders of the urinary organs, points out how more room can be gained, if necessary, by passing a curved probe-pointed bistoury into the bladder along the pulp of the finger, and then cutting with it downwards and outwards to the prostatic capsule and enlarging the wound in the same direction as the knife is withdrawn. I think it is everywhere admitted that this is the easiest and safest way of entering a bladder for the purpose of exploring it. In obscure diseases of the bladder wall it will become more common not only for the purposes of diagnosis, but for the purpose of treatment. Through it the bladder can be thoroughly drained and put at complete rest, as can also the urethra, so that the mucous membranes get time to recover, just as in the female where dilatation

of the urethra for the purpose of exploring when no cause is found for the bladder trouble, often cures the disease completely by paralyzing the sphincter and giving the viscus rest.

I have performed median cystotomy twice for chronic cystitis which had persisted for years, and each time with great benefit to the patient.

Besides for the purposes of exploring, removing tumours of the prostate and bladder, draining the bladder in cystitis, and of prostatectomy, Mr. Harrison practises this operation, in a somewhat modified form, for certain cases of stricture where instrumentation is apt to be followed by a great deal of febrile excitement, and where an internal urethrotomy alone would be dangerous. His intention is thus to stop all danger of sepsis or urethral fever by keeping the urine from contact with the diseased urethra. Let me quote a case to show the advantages which followed complete removal of urine from contact with a raw or diseased urethral mucous membrane.

C. P., aged twenty-six, was admitted to the hospital suffering from an organic stricture of the bulbous portion of the urethra. The stricture was the result of gonorrhoea, which he had contracted when he was about sixteen years of age. It had been dilated to the size of a No. 7 on several occasions, but always recurred very rapidly. With some difficulty I succeeded in getting a whalebone bougie into his bladder, and this was followed by a severe rigor. To make the history short, suffice it to say, that after a great deal of trouble I succeeded in dilating gradually to the size of a No. 9, but after almost every operation he had a rigor, even after the gentlest handling. He was discharged from the hospital, with instructions to come regularly to have an instrument passed. This he partially neglected to do, and soon had to be admitted again for further treatment. He being so subject to rigors I determined to perform internal urethrotomy, and, in addition, to drain his bladder through the perineum. His stricture being still large enough to admit a Thompson's urethrotome, I divided the constricted part completely along the floor of the urethra, passed a large median staff, entered the urethra at the apex of the prostate, as in median perineal cystotomy, next passed a probe into the bladder as a guide for a No. 12 gum elastic catheter, which I used as a drain, draining the urine by means of a tube into a vessel by the side of the bed. The patient escaped all constitutional disturbance after the operation. At intervals of three days I passed a large sound through the divided stricture, and washed out the urethra from the front with anti-septic solution. At the end of three weeks the bladder drain was removed, and in a short time the urine flowed

through the natural channel. The patient left the hospital with Nos. 12 and 14 soft catheters (English scale), which he was instructed to have passed at intervals of fourteen or twenty-one days. I saw him nine months after, when he described himself as being more comfortable than he had been for ten years. He has since married.

The advantages claimed for this operation are :

1. Avoidance of grave constitutional disturbance.
2. Avoidance of risk of extravasation.
3. The stricture is more pliable after, and less liable to contract.

#### LATERAL PERINEAL CYSTOTOMY.

This classical operation has not been changed in any essential respect since the days of Cheselden. It is one of the best-planned operations in surgery. Although its scope has been greatly limited by the practice of litholapaxy and the supra-pubic operation, I hope there will still be a place left for it in the future. It used to be the delight of surgeons before the introduction of litholapaxy and the revival of the high operation.

An able, brilliant and kind-hearted old surgeon of my student days, was used to express his ideas about heaven in the following words : "Heaven is a place where all the good people are cutting the bad people for the stone."

Gentlemen,—As I have already said, I make no pretence of travelling over the whole field of the practice of cystotomy. The subject is an exceedingly important one, for, I suppose, few operations can claim to do more in the way of relieving human suffering, when judiciously carried out.

#### CASE OF RECURRENT LARYNGEAL TUMOUR.

By W. F. QUARF, M.B., ETC.

M. H., a healthy man, of middle age, had been troubled for twelve months with a growth in his throat, which impeded more or less his speech, respiration, and ability to swallow at one time and another. At times it broke away, but always recurred, and when it had come away the symptoms always improved. The symptoms were finally becoming urgent.

On inspection I found a large trilobate fibroid tumour situated above the true cords and nearly altogether filling up the glottis, so that a little inflammation would have completely choked the patient. I removed this growth with great ease by means of a laryngeal ecraseur, after a little tugging ; and when he came back the next week I was surprised to find another tumour, apparently also a full-grown fibroma, pressing up from beneath the cords, and attached evidently to the lower

surface of the right cord, beneath its free edge, near the angle of the glottis. This growth was about a third of the size of the former one, and did not interfere with the breathing, but completely prevented the cords from coming together. I removed it with the cold snare, but with a little more difficulty than the other, on account of the protection afforded it by the cords. At this time there was not anything like so much hæmorrhage as before.

Between this time and the time when I was able to apply the electric cautery to the roots the upper growth recurred no less than four times in rapid succession; and one of these growths, of which I have made microscopic sections, reveals an embryonic structure, like that of a fibro-sarcoma. I destroyed the seat of growth finally by means of chromic acid crystals delicately applied on the point of a silver probe, and found this much more efficacious than the electric cautery, this being due, I do not doubt, to the depth to which the chromic acid permeates the tissues. The lower growth has shown no sign of recurrence.

There was some paresis of the arytenoids and subsequently of the lateral crico-arytenoids which interfered with vocalisation for a time. This gradually passed away under the use of strong silver nitrate solutions, and after a little faradisation the voice became perfectly useful; it subsequently recovered the whole of its natural timbre, though not to the full its original strength.

A point worth remarking is the large quantity of cocaine which I was obliged to use over this case. An impression prevails that weak solutions are sufficient, and that there is danger in strong ones; but though I used the purest German preparations I could get, viz., Merck's and Schering's, my first operation required a 5 % solution, the second a 20 %, and the later ones required a 80 % solution, with the additional administration of bromides internally. The cocaine was used partly in spray and partly with brushes and cotton holders. The most useful cocaine solution I made with hydrochloric acid (strong), neutralising it with sodic carbonate afterwards. I also tried the salicylate and the hydrobromate, but could not make them strong enough. I am quite well aware that for nasal purposes the activity of cocaine is apt to fall off, but never before noticed this so markedly in the throat.

Such large growths in the larynx are decidedly uncommon, and it is more uncommon still to find two large ones arising at once from two different spots. The origin of the upper one must have been submucous, from the depth to which the cauterisation had to be carried, and I believe there was in it a true sarcomatous element.

Elizabeth Street, Sydney, January, 1889.

### A PECULIAR CASE.

By ANDREW W. NASH, M.B., C.M.,  
WALLSEND, NEW SOUTH WALES.

THIS short case may be of interest to the medical profession in so far as it is rare and unique, and shows us how a woman may use herself, or let others use her, in order to avoid bearing children.

One evening, in my consulting room, a young married woman presented herself with the following story:—"She was six weeks pregnant, and, as she did not wish to have any more children, some female friend had told her how to get rid of it, viz., by passing a hair-pin into the womb. Taking this woman's advice, she tried it, and did it so well that she could not get the hair-pin out. She now came to me to have it removed."

On examination with my fingers I could feel nothing peculiar about the vagina or cervix uteri. On introducing a Ferguson's speculum, I found the cervix inflamed and pus issuing from the os. With a Simpson's sound I carefully explored the inside of the cervix for about half-an-inch, but apparently it was as it should be. I then asked her if she was sure the hair-pin had not fallen out amongst her clothes, but she was certain it was in the womb, and I told her to come back in the morning which she did. Once more I introduced the speculum, and found the pus still issuing from the os uteri, and, using the sound as a probe, after about half-an-hour's trouble, I succeeded in withdrawing an ordinary black hair-pin two inches long. She had introduced it with the round end upwards. The points must have been at least one inch and a half from the os externum. These had been pressed together when passing it, and this explains how I came to remove it, for the knob on the end of the uterine sound caught between the bars of the pin, and, on withdrawing the sound, the pin came with it.

A few interesting points about this case are:—

1. One might be excused for being somewhat dubious about her story.

2. It occurred to me that she might have made the story up for the purpose of getting some instrument passed into the uterus to procure an abortion, but she was so positive about the hair-pin being in the womb, and taking into consideration the condition of the cervix and the pus issuing from the os, that I felt justified in using the sound.

3. Could a woman with her own hands pass a foreign body so completely into the uterus?

The woman had a miscarriage about 18 hours after removal of the hair-pin, and is now perfectly well.

## TWO CASES OF STENOSIS OF ŒSOPHAGUS, TREATED BY GASTROTOMY.

BY H. C. GARDE, F.R.C.S., ETC., SURGEON TO  
THE MARYBOROUGH HOSPITAL, QUEENSLAND.

Case I.—George W., aged 60, consulted me in June, 1888, complaining of pain and difficulty in swallowing, accompanied by a disagreeable discharge; he said he had been under medical care during the previous seven months, the case being treated by caustic applications once or twice a week and gargles. On examination, a cancerous mass (Epithelioma) was seen, extending from the uvula across the soft palate, and downwards and backwards, taking in the anterior pillars of the fauces. Immediate removal was advised, and next day I cut away the soft palate and as much as possible of the downward growth, cocaine, in solution, being first applied. After the first few days the act of swallowing was almost free from pain. He was informed that a return of the disease would probably take place. It did, in about two months, so as to require a second removal; and again, in the course of six weeks, a third attempt was made to get away the growth. As matters grew worse and no hope of a recovery could be held out, he, urged on by some friends (?), went to consult an individual named "German Charley"—who lives some miles out of Sydney, and who enjoys a reputation for having performed some such similar wonders. In consequence, I lost sight of him, until early in February, 1889, when he sent for me; and, as anticipated, he had got gradually worse, the course of the disease being in no way retarded by the little sugar granules of his Teutonic friend. The glands in the neck were swollen considerably, and the mass had grown to such an extent, filling up the post-nasal region, that it was with the greatest difficulty he managed to get down even liquids, greater trouble in doing so being experienced every day. To relieve symptoms an artificial opening into the stomach was suggested, to which he readily consented, and, on February 10, chloroform having been administered, an incision was made two and a half inches in length, an inch below and running parallel with the lower border of the left costal cartilages, dividing everything down to the peritoneum, which was next picked up, and divided to the full extent of the external wound, the left index-finger introduced into the abdomen, and the stomach made out; the middle finger was then inserted, and a portion of the stomach wall ripped up between them and

brought to the surface, when it was seized by means of an artery forceps. The next step was the insertion of a strong silk ligature into the serous and muscular coats, taking up about the third of an inch; it was tied into a loop, about a foot long, and served admirably to steady the organ, and enabled me to dispense with the forceps, which took up more room. A double row of sutures were then put in; the outer ones, of silk, weretied over a piece of a bougie, the inner ones at the lips of the wound were of silver wire; the long loop was allowed to remain, and proved of service in the second portion of the operation; a piece of lint steeped in carbolic oil was placed between the margins of the wound, absorbent cotton and bandage applied, and the second portion, *i.e.*, of making the opening into stomach left over for a few days. The temperature fell slightly for six hours after he was removed to bed, and did not go over 99 deg. during the treatment of case. Nutrient enemata were given every four hours, and on February 14 a small opening was made by means of a tenotomy knife into the stomach, and a piece of No. 8 catheter slipped in, and kept in position by having a hare-lip pin passed through it; two ounces of milk were then injected with a glass syringe. All sutures were removed by Feb. 17, by which time he could take nearly a pint of milk or beef-tea at a time. The end of a No. 12 catheter, joined on to a glass funnel by a piece of rubber tubing, has enabled him to feed himself without trouble. During the first six weeks after the operation he put on flesh, but of late he has fallen off. The disease has continued to grow, and will doubtless before long bring the case to a close; however, he has experienced considerable relief, and has felt grateful and satisfied at the result.

### CASE II.

James H., aged 61, came under my notice about eight months ago, suffering from all the symptoms of œsophageal stricture, and which he said he had suffered from, more or less, for some years, but that they were gradually getting worse. He objected to my trying to pass a bougie, and, in fact, would not submit to any treatment. Consequently, I lost sight of him until the 14th of March last, when he returned from the seaside where he had been for two months. He was then in a state of starvation, and unable to swallow even a cup of water. He was at once put on nourishing enemata, and, as there was no time to be lost, on the next day I operated. It took him all his time to rally from the shock to the system. The details are the same as case No. 1, except that all the sutures were of silk, and the opening into the stomach was made on the third day. He has picked up wonderfully

since then, and is so satisfied with the result that he won't let me try a bougie. From the length of time the symptoms have gone on, coupled with the absence of any physical signs of malignant disease, I think it probable that the case is one of stricture due to some cicatricial tissue, the result, possibly, of the passage of irritating particles of food taken years since, so that the prognosis is fairly favorable.

Maryborough, Queensland,  
May 1, 1889.

### A NEW METHOD OF OPHTHALMOSCOPY.

READ BEFORE THE MEDICAL SECTION OF THE ROYAL SOCIETY OF N. S. WALES.

By B. SCHWARZBACH, M.D.

At the last November meeting of the Berlin Medical Society—at which meeting I was present—Dr. Bellarminoff, of St. Petersburg, explained and demonstrated a new method of ophthalmoscopic examination, which seems so simple, and is comparatively so easy, that it is a surprise it not having been previously introduced into eye practice. I shall, with very few words, endeavour to make clear the same, its advantages as well as disadvantages. If a small plane glass is gently pressed against the cornea, the convexity of the latter will be abolished, and the moisture of the cornea will "spread" between the glass and the corneal epithel. The eyeball—which has now become in a state as if under water—becomes thus hypermetropical in a marked degree, so much, that the strongly diverging rays of light will easily reflect from the back of the eyeball into the eye of the observer. The examination is to be made in the following manner:—

A small ordinary round glass of about 8m.m. in diameter is brought in contact with the cornea, gently pressing the same. Of course cocaine installations have to be made previously. After having brought the glass, which for convenience sake should have a handle, into position, the interior of the eye may now be illuminated with the aid of an ordinary round plan-mirror. If the pupil is dilated, diffused daylight will suffice for the purpose. But the retinal picture becomes easier recognizable and clearer if daylight protrudes through a small round opening. In examining by artificial light, a reflector may be substituted, although not necessarily. It is also not imperative that the reflecting glass should have a hole in its centre to look through, because the light may fall sideways on the eyeball, thus enabling two or three persons to make an examination at the same time. This process is certainly

more easily acquired than the old one, but it necessitates some little practice to use it with advantage.

There was, and is, some diversity of opinion amongst oculists in Berlin about the utility of Dr. Bellarminoff's method. Some professional gentlemen, like Prof. Schöler, Uthof, even Prof. Schweigger, admit that it must be of good service in certain cases. Others, especially Prof. Hirschberg, condemn the whole manipulation. Hirschberg calls attention to the fact that he, himself, already in 1882, has published some similar experiments, which he made on the eyes of fishes, demonstrating how much easier such eyes can be ophthalmoscopically examined under water than above water. The reason why he did not examine human eyes in a manner as Dr. Bellarminoff, is because cocaine was not then introduced into eye practice. Hirschberg asserts, with some right, no doubt, that the finer inter-ocular changes cannot be recognized with the new method; for this purpose the upright enlarged retinal picture is necessary, and great routine of the observer. The retinal picture also cannot be examined on its optical value, because the action of the cornea as a light-breaking medium has become abolished. It seems to me there is also a possibility, by practising the new method in a clumsy manner, to dislocate the crystalline lens. Another disadvantage is the necessity of using cocaine, although, as a local anæsthetic has to be applied, cocaine is certainly the very best, because it not only deadens the sensibility of the cornea, but it dilates the pupil and raises the upper lid.

It certainly is the Russian doctor's merit of having introduced the old principles of his new method for practical purposes. I repeat: one of its advantages lies in its easy acquirement. Professional gentlemen, who may have little practice only in ophthalmoscopy, will find no difficulty in using it. It will also prove to be of service in cases where small children, or insane persons, or patients lying in bed, have to be ophthalmoscopically examined. Irritation to the cornea has so far not been noticed by it, but it is self-evident that such irritation may occur through a clumsy handling of the glass, or, what would be worse, through infection with an unclean glass.

I consider the new manner of ophthalmoscopy of sufficient interest to draw your attention to the same with these few words, giving it for what it is worth. The meaning of my words will become clearer if I may be allowed to demonstrate the object of my paper in a few cases.

P.S.—Since reading the above short paper before the Medical Section of the Royal Society, May 17th, I learn from German Medical publica-



tions that Bellarminoff's method of ophthalmoscopy has found more lasting favour with members of the profession than at first anticipated. Various general practitioners recommend it for simple requirements, and oculists of repute have adopted it as a part of ophthalmoscopic instruction to the students at Universities. Uthof of Berlin speaks favourably of the extension of the field of vision in using the same, and the *Wiener Medizinische Presse* quotes professional men of Austria and Italy who recommend its application in specified cases. It is considered to be more than an experiment or a scientific toy. Although far from replacing the older methods of examination, it will do good service in cases where the latter cannot be used with benefit. Eye patients are not able at all times and at all places to go to a specialist for advice. A general practitioner, even if he had no special ophthalmoscopic training, should be able to recognize at least a discoloration of the optic disc or a change in the retinal vessels, and may thus give early help in serious inter-ocular afflictions. This knowledge can easily be acquired by the aid of the new method, in spite of its deficiencies. Improved manipulation would yet increase its value. It can be noticed by the tenor of my paper that I am not very enthusiastic about the subject, but I certainly do not consider myself of sufficient competence to contradict the opinion of several authorities at home, who believe it to be of some value. I am willing to foster the knowledge of the same, and will be pleased to instruct medical men who may apply to me, in the practical use of Bellarminoff's method of ophthalmoscopy.

151 Macquarie-street,

Sydney, June 5.

## PROCEEDINGS OF SOCIETIES.

### MEDICAL SOCIETY OF VICTORIA.

THE ordinary monthly meeting of the Medical Society of Victoria was held in the hall of the Society, East Melbourne, on June 5, under the presidency of Dr. Balls-Headley. About 20 members were present. Dr. F. M. Johnson, of South Melbourne, and Dr. Laycock, of Collins-street, were elected members of the Society. Dr. Rothwell Adam gave an account of a rare case of disease, in which operation had been successful, and which elicited a lengthy discussion. Dr. Ross, of Macarthur, read a paper on a case of blood poisoning. Dr. J. W. Barrett exhibited two cases of hydatid of the orbit, and the meeting then closed.

### NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 80th general meeting of the Branch was held in the Royal Society's Room, Sydney, on Friday, 8th May, 1889, at 8 o'clock. Present: Dr. Fiaschi, President, in the chair, Drs. Bowker, Crago, Hodgson, Reddall, Rennie, Foreman, Todd, Roth, Pockley, Newmarch, Shand, Ross, W. J. O'Reilly, Cohen, Lyden, G. A. Marshall, Quaife, Traill, Worrall, Martin, Ellis, West, Parker, A. O'Reilly, and Scot Skirving.

Visitors: Drs. Sutherland, Harold Browne, and J. B. Nash.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced that Drs. Wilkinson, De Lambert, Gwynne Hughes, and Oliver had been elected members of the Branch.

DR. BOWKER read some notes on a case of Nævus of the eyelid, treated by subcutaneous injection of solution of tannic acid.

DR. E. FAIRFAX ROSS made a few remarks as to the want of success in the use of electrolysis in cases of nævus.

DR. HAROLD BROWNE said he remembered a case of nævus of the buttock, in which electrolysis had been used with marked success after the canterly had failed. The nævus was 2 inches by 2½ inches, and after 10 sittings it had almost disappeared, there remaining only a very slight scar.

DR. NEWMARCH said that we ought to distinguish between the superficial and the subcutaneous varieties. With regard to the trouble arising in Dr. Bowker's case it, no doubt, was the result of a clot in the general circulation. He (Dr. Newmarch) thought in these cases it was always better to cut down and tie the supplying vessels. Electrolysis was all very well where you could be sure the nævus was isolated; but where isolation could not be obtained it was better cut down.

DRS. TODD AND POCKLEY took part in the discussion.

DR. BOWKER, in reply, said it would have been a difficult matter to have cut down on the eyelid in this case, but, if such a case came under his observation again, he certainly would not use injections, as the symptoms in this case had been very alarming. The great difficulty in cutting down in these cases is the isolating all the vessels, and the risk of sloughing and thereby losing a portion of the eyelid.

### DISCUSSION ON ANTIPYRIN AND ANTIFEBRIN.

DR. F. H. QUAIFE opened a discussion on Antipyrin and Antifebrin, and said:—These drugs, which have been introduced into practice at a comparatively recent date, are of great importance on account of their extremely valuable properties, the extent to which they are employed by the profession and the public, and the varying experiences that have occurred in their use. In L. Brunton's therapeutics, 1887, antipyrin is described as used in fevers, phthisis, erysipelas, surgical fever, pleurisy, and pneumonia, in doses, for adults up to 30gr. hourly for three hours; in children, 1½gr. for each year of age. Antifebrin is described not so fully, but much in the same terms;

but the doses are much smaller,  $\frac{1}{4}$  to 1 grm. not exceeding 2 grms. in 24 hours. It is said to reduce temperature, slow the pulse, cause sleep, and there is the significant note that it may cause collapse. He (Dr. Quaife) had taken at random a few notes from several "Practitioners" on these drugs, and found that antipyrin is the drug that has up to lately been most used, and the following appear to be the main effects which have been witnessed:—Reduction of temperature. Relief of sick and other headaches. Relief of pain, and shortening of the first stage of labour. Induction of sleep. Checking the fits in epilepsy. Relief of chronic symptoms. . . There are many other purposes also. Antifebrin seems to have been mainly used as an anti-pyretic. The testimony generally given seems to be highly favourable in the above respects, especially, perhaps, as regards the administration of antipyrin in migraine, some observers placing complete reliance on its use. In epilepsy, also, very good results seem to have followed; but one writer is very careful to caution against the hypodermic use of it, as he has seen alarming results follow in animals. Of all the results, those in labour and in chorea seem to be the least certain and advantageous. Antifebrin is specially commended in enteric fever, sciatica, and as an hypnotic in delirium tremens with insomnia and exhaustion. Antipyrin soon began to be made responsible for mischief. Alarming symptoms of collapse are recorded by various authors, and by doses as small as three (3) grains. Also urticarial rashes have been noticed after its use, with an excessively lowered temperature; giddiness also has been caused. It was then said that in antifebrin we had a safe substitute for the other drugs, and especially so as regards collapse. But, since that, other practitioners have found the same troubles occurring after its use, and some look upon it as highly dangerous, and worse than the other. All allow that great caution must be observed in using both of them, especially antifebrin. It is for this reason that I have asked the Society to discuss the uses and dangers of these drugs. He (Dr. Quaife) did not profess to have much experience of them himself, but he hoped that the consideration of the subject would be both interesting and profitable.

DR. ELLIS said he had been using these drugs for some time and had taken a great deal of trouble to arrive at the correct conclusion as to their relative value. Every person, apparently, is in the habit of prescribing one of these drugs for all sorts of aches and pains. He (Dr. Ellis) suffered from relaxed veins and took antipyrin in 5 to 10 gr. doses, the effect was very marked on the first day; but on the next day the feelings became very much depressed. There is no doubt antipyrin brings down the temperature. He (Dr. Ellis) next used antifebrin in 3 gr. doses, and the results were very much better than in the case of antipyrin. He also had used antifebrin in a case of asthma in a young girl who had frequently been two and three days without sleep. 5 gr. doses were commenced with, but after a few hours the girl had a series of faints, ammonia was then given her and she became better. Her circulation has, however, improved very much since taking the antifebrin, showing that this drug is useful in cases of asthma if carefully administered.

DR. SHAND said he was in the habit of using antifebrin and found it generally more satisfactory than antipyrin. He (Dr. Shand) had only used the drug in typhoid, but was not altogether satisfied, as in one case he gave a 4 gr. dose which produced collapse.

DR. CRAIG said he had used antifebrin in 4 or 5 gr. doses, and found that after taking a 5 gr. dose the temperature went up one degree within the first hour, but afterwards the temperature came down; also in

the case of a member of his family who had an attack of typhoid when a 5 gr. dose was administered it caused an exhausting perspiration and the patient declined to take any more of the drug. The temperature was found to come down to normal in the morning with a rise in the evening. In the first case he (Dr. Craigo) had used antifebrin the results were satisfactory, but that was after antipyrin had been tried and only bad results followed, then antifebrin was given and an improvement was speedily noticed. In another case of typhoid in a woman and child the temperature was found to come down as well without the use of a drug. In one case where, with the advice of a consultant, a 10 gr. dose was given great collapse occurred. Some months ago he (Dr. Craigo) noticed an article in the *B. M. Journal* in which it stated that antifebrin was useful in whooping cough.

DR. WORRELL said he had prescribed antipyrin for cases of neuralgia with very good results, but the use of the drug was not satisfactory in the cases of women in labour. It was certainly of value in dysmenorrhoea. As for fever, he was against the indiscriminate use of these drugs to reduce the temperature. No doubt in emergencies they were valuable, but in ordinary conditions of pyrexia in enteric fever, the pyrexia might, for all we know, be a salutary factor.

DR. SCOT SKIRVING said: In these two drugs we have, undoubtedly, a potent means of lowering temperature. My experience of them has been chiefly in typhoid fever, but in pneumonia, peritonitis, and the exanthemata I have found them of value. Now as to enteric fever. I have, up to now, arrived at the following conclusions:—1. Neither of these drugs curtail the life history of the fever. 2. Although the temperature may be lowered it again rises, in antifebrin, I believe, higher than before. 3. Both drugs may produce urgent symptoms of collapse, markedly antifebrin, and the dose should be very small to allow for idiosyncrasy;  $\frac{1}{2}$  gr. of antifebrin for a child of 3  $\frac{1}{2}$  is not too small a dose to begin with, antipyrin can be used more boldly, 3 gr. for a child of five being a fair thing. I have, as you will see by these charts, used that dose in children when temperature rises over 103° repeated every six hours. 4. I believe that on the whole the routine treatment of a continued fever by chemical antipyretics is a vain thing. The most useful applications of such drugs as those under discussion is for emergencies, where, either as an incident in the history of typhoid, or in the initial pyrexia of an acute inflammation or an exanthem, danger to life is present by reason of the pyrexia, which, being for the time avoided by the bold but careful use of a chemical antipyretic, is not likely to recur.

DR. TODD said his experience in antipyrin was with regard to its use in pneumonia, when it was given not so much to control the temperature in these cases. The future of antipyrin depended upon its taking the place of opium. In one case he (Dr. Todd) remembered in which the patient described his sensations after taking antipyrin. In the first stage the patient's great desire was to sleep, and when he roused up everything appeared to be enlarged to the vision. Another case also came to his (Dr. Todd's) remembrance in which the patient received relief from antipyrin, and that was a case of gall stones. The general experience of people was that in cases of pneumonia morphia was to be avoided as being a dangerous drug in such cases, and antipyrin gave very much better results. Where, again, you get high temperature in cases of *delirium tremens* antipyrin is dangerous.

DR. MARTIN said he had had a little experience in the use of antipyrin, which appeared to be very much

the same as that related by Dr. Scot Skirving. There is no doubt the drug reduces temperature, but at the same time it reduces the strength of the patient. He (Dr. Martin) would rather have a high temperature than use antipyrin for bringing it down.

DR. SUTHERLAND said his experience led him to believe that antipyrin was more reliable than antifebrin. In typhoid he (Dr. Sutherland) has been in the habit of giving brandy to counteract any depression, and had always found the patient better for the sleep induced by antipyrin. For sea-sickness antipyrin is largely used, but with no good result. In persistent headache of sea-sickness, antipyrin is, however, very useful, and as much as 30 grains per day may be given. In his (Dr. Sutherland's) opinion the doses mentioned by the several gentlemen in the discussion, were too small to be of any great benefit.

DR. POCKLEY had used antifebrin in typhoid, but believed that small doses should be used. He remembered administering a 5-gr. dose to a child which brought the temperature down from 105 degrees to 98. Another patient—who lived at a long distance from his (Dr. Pockley's) residence, and who could not be seen frequently—had taken as much as 80 grains in eight hours, with no very bad results.

In cases of chorea he had found this drug useful, and, in one case, the worst he had ever seen, he (Dr. Pockley) gave  $7\frac{1}{2}$ -gr. doses with marked success, the drug was left off after a time and the child was brought back, when 10-gr. doses were tried, but the case got worse. It shows pretty conclusively that a great deal of care must be taken in administering this drug, as, in one case, 80 grains can be taken by a patient without any bad results, and in another case, 10 grains does mischief.

DR. HODGSON said he had used antipyrin in the case of asthma with fair results. He (Dr. Hodgson) has prescribed it largely, but with no striking results. In the case of antifebrin the results vary, as one dose, in one patient, may act well, but if on a second observation, the result is not so satisfactory.

DR. NEWMARCH said about three weeks ago he gave 2-gr. doses of antifebrin to a patient, which brought on very marked collapse. He (Dr. Newmarch) was first induced to use antipyrin for phthisis, and in all cases of high temperature had prescribed 5-gr. doses, until he came across a patient—a very intelligent chemist—who described the sensations produced by the drug, and as no good result was shown the drug was discontinued. It is, however, useful in the case of gallstones.

DR. BOWKER said he had never used these drugs, but had read a great deal about them, and so far, did not think they were altogether satisfactory. In cases of typhoid, where the temperature kept about the same, there was no need to use drugs. According to the *B. M. Journal*, antifebrin appears to be used for everything. Some say it is easily eliminated from the kidneys, while others say that if there is any kidney trouble do not give antifebrin.

DR. ELLIS proposed: "That no member of the Branch be eligible for election for Committee or Office who has not attended at least two Ordinary General Meetings during the previous year. The number of Meetings attended by each Member being recorded and sent out with the Ballot Paper for election.

DR. QUARF moved as an amendment, that the following words be added: "Except on account of absence through illness."

The resolution, as amended, was carried.

## MEDICAL SOCIETY OF QUEENSLAND.

GENERAL Meeting, held April 13, at the Divinity Hall, Creek-street, Brisbane. Present: Drs. Thomson, Little, Gibson, W. S. Byrne, Shout, Tilston, Edgelow, McNeely, Booth, P. Bancroft, Forbes, Clowes, Campbell, and Love. Visitor: Dr. Tomlinson.

DR. LITTLE shewed, for Dr. Hill, an interesting nervous case, which most of the members who examined it considered to be an example of cerebro-spinal sclerosis.

DR. GIBSON shewed a child, æt. six years, upon whom he had operated for a cleft of both hard and soft palates some two years since.

DR. Edgelow said that he had sent a written notice of two motions to the Secretary, but that he had received no reply.

The SECRETARY explained that the notices of motion had been duly laid before the Council at their last meeting, and their decision had been communicated to Dr. Edgelow by letter. If the mover had not received a reply it was owing to some default in the postal arrangements, as the letter should have been in his hands the morning of the day of meeting. The Secretary also explained that the delay was unavoidable, owing to a press of work both private and connected with the Society. The motions, however, would be considered at the following meeting in due order in accordance with the by-laws.

DR. BOOTH stated that he would give notice of a motion to regulate the scale of fees chargeable by practitioners.

The PRESIDENT expressed the opinion that the question of fees came under the head of Ethics, which were proscribed by the by-laws of the Society. If Dr. Booth wished the subject to be considered he would need to convene a special meeting of the profession independent of the Society.

DR. MCNEELY also spoke approvingly of Dr. Booth's proposal, and dwelling specially upon the need for co-operation with regard to the fees for club practice.

DR. LITTLE was then invited by Dr. Booth to take up the subject, and promised he would consider it.

DR. GIBSON then read a paper on cleft palate and its treatment. A capital discussion ensued in which most of the members took part.

DR. LOVE then read for Dr. Dunlop, of Ipswich, the notes of a case of typhoid perforation, with abscess formation, operation, and recovery, which paper had been postponed for some months. Some discussion followed, in which members expressed the opinion that Dr. Dunlop had not proved his diagnosis of perforations.

GENERAL Meeting held May 13, at 8.30 p.m., at the School of Arts. Present—Drs. Thomson, Tilston, Furley, Hardie, Gibson, Hare, Connolly, Booth, Edgelow, Mullen, Bancroft, Shout, Owens, W. S. Byrne, Little, Campbell, Hill, and Love.

DR. GIBSON shewed a case of cyst in the anterior chamber.

DR. BOOTH shewed a carcinomatous uterus.

DR. OWENS shewed a piece of brass from a gun cartridge, which he had removed from behind the eye in enucleating.

The minutes of the last meeting were read and confirmed.

The PRESIDENT explained the Divinity Hall difficulty, and stated that as no answer has been received to his letter, the Society was obliged meanwhile to return to its old quarters.

The PRESIDENT proposed that, under by-law 19, the names of Kevin Izod O'Doherty, F.R.C.S.I., Croydon, Kearsy Cannan, M.R.C.S., Brisbane, Hugh Bell, M.D., Brisbane, be put upon the roll of honorary members. The gentlemen named were the fathers of the profession in Brisbane, and had done long and honourable service in the cause of medicine here. Seconded by Dr. Mullen. Carried.

DR. BANCROFT gave notice that he would propose the name of Dr. Margetts, of Warwick, for a similar honour at the next meeting.

DR. EDGELOW then brought forward two motions. (1). "That the Society considers it advisable to establish a local Medical School as a preliminary step to founding the University, which has been so long talked of." Seconded by Dr. Booth.

The SECRETARY moved as an amendment, and Dr. W. S. Byrne seconded, "That the question be postponed *sine die*. In doing so, the Secretary explained that eighteen months since the question had been before the Society and was fully discussed. The resolution that was decided upon, viz., 'That the establishment of a University capable of granting degrees in Medicine, Law, and Divinity was premature,' was embodied in the form of a petition, and signed by most of the Members of the Society, and duly forwarded to the Chief Justice. Since that date nothing further had transpired with regard to the movement.

The amendment was declared carried.

(2). That the Society considers it advisable to become affiliated with the British Medical Society." Seconded by Dr. Booth.

The SECRETARY proposed as an amendment, and Dr. Gibson seconded, "That the Society remain as at present—The Medical Society of Queensland." Both mover and seconder pointing out the advantages of remaining independent, and supporting the *Australasian Medical Gazette* as the leading Medical organ in Australia. Amendment was declared carried, on a division.

DR. BOOTH proposed (1) "That a committee be appointed to draw up a scale of fees for adoption by the members of the Society. The President intimated that, in accordance with by-law 24, the question had been submitted to the Council and ruled inadmissible.

(2) "That the rules of the Society be revised and printed, and each member provided with a copy of the same."

DR. GIBSON seconded the motion, which, after some discussion, Dr. Booth consented to modify to the effect that a sub-committee consisting of Drs. Bancroft, Love, and the mover be appointed to revise the rules and to submit them in their revised form to a future special meeting. Carried. In connection with the question of rules Dr. Tilston gave notice of the following motion:—"To add to rule 17, after the words 'registered in Queensland,' the words 'who shall have resided within ten (10) miles of Brisbane Post Office for a period of six months, or in any other part of the colony for a period of twelve (12) months.' The rule to read as follows:—'Ordinary members shall consist of any qualified practitioners registered in Queensland who shall have resided within ten (10) miles of Brisbane Post Office for a period of six (6) months, or in any other part of the colony for a period of twelve (12) months.' The remainder of the rule as before."

DR. OWENS then brought under the notice of the Society the new Medical Bill, but after some informal discussion it was decided to postpone the consideration of it to a special meeting, to be held on Wednesday, May 22.

A number of preparations from Burroughs, Wellcome and Co. were distributed among the members.

## SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

### MONTHLY MEETING HELD AT THE ADELAIDE HOSPITAL ON MAY 30.

PRESENT: Dr. Clindening (in the chair), Drs. Hayward, Lendon, Swift, Marten, Davies-Thomas, Melville Jay, Cawley, Anstey Giles, T. K. Hamilton, and the hon. sec. Dr. Mackay was present as a visitor.

The minutes of the previous meeting were read and confirmed.

DR. MACKAY showed for Dr. Stirling a boy with webbed fingers on whom he had recently operated for one hand.

DR. THOMAS showed a section of sarcoma of lung.

The SECRETARY showed a humerus affected with periosteal sarcoma, for which he had amputated.

DR. MARTEN showed a copy of *Colpeper's London Dispensary*, published at Ludgate Hill in 1675.

A ballot was taken for Messrs. Timothy Augustine Hynes, M.B., Ch. M. (Edin.), Tanunda, and for John Walter Yeatman, M.R.C.S., L.S.A., Auburn. Both gentlemen were elected members of the Association and the S.A. Branch.

Papers were read on Cholelithotomy, by Dr. Way (read by DR. LENDON); Cholelithotomy, by DR. LENDON; Sarcoma of Lung, by Dr. DAVIES-THOMAS.

After several members had made remarks on the papers read the meeting adjourned.

### CHOLELITHIASIS WITH OBSTRUCTION OF CYSTIC DUCT; SUCCESSFUL CHOLELITHOTOMY.

By EDWARD WILLIS WAY, M.B. (EDIN.),  
LECTURER ON OBSTETRICS AND GYNÆCOLOGY IN THE UNIVERSITY OF ADELAIDE,  
AND PHYSICIAN FOR DISEASES OF WOMEN  
AT THE ADELAIDE HOSPITAL.

MRS. B——, æt. 22, consulted me early in 1888, for a tumour in the right hypochondriac region. The history did not suggest any previous attack of biliary colic or the occurrence of an obstruction in either the common or the cystic duct, and as the tumour appeared to be cystic in character I thought that it would most likely prove to be a hydatid of the liver. My patient was admitted into the North Adelaide Private Hospital, where, on Feb. 8, with Dr. Lendon's assistance (Dr. Aitken also being present), I performed an exploratory abdominal section. On reaching the tumour, an aspirator needle was inserted, and some clear fluid drawn off, confirming, as I thought, my diagnosis. The cyst was then secured with silk ligatures, drawn out of the wound, and incised, whereupon a considerable quantity of fluid escaped, together with a large number of small gall stones. The finger was then introduced into the gall-bladder, and many more small calculi removed, together with one solitary large concretion. It was next discovered that the

cystic duct was occluded by a stone of considerable size, which was firmly impacted. This was, with much difficulty, broken up into fragments and scooped out of the duct, which was inverted as far as possible into the gall-bladder for that purpose, and when this had been done, the bile found its way out freely. The wound of the gall-bladder was then stitched to the abdominal parietes with silk in the usual manner. The subsequent progress of the case was satisfactory, and there was no constitutional disturbance. Bile-stained fluid was, however, discharged very copiously for some time, and the sinus did not close until some weeks had elapsed. The patient is now in perfect health.

### CHOLELITHOTOMY AND SUBSEQUENT PASSAGE OF A GALL STONE.

BY ALFRED AUSTIN LONDON, M.D. (LOND.),  
LECTURER ON FORENSIC MEDICINE IN THE  
UNIVERSITY OF ADELAIDE, AND HON. ASSISTANT PHYSICIAN, ADELAIDE HOSPITAL.

MRS. D—, æt 44, came under my observation first in February 1888, her history being briefly as follows: she had been twice married, and had had one child by her first husband; she was deserted by her second husband, who communicated syphilis to her, and this necessitated her getting her living as a seamstress, and consequently condemned her to a very sedentary existence; ever since girlhood she had suffered more or less from indigestion, but especially of later years since residing in the colonies. In January 1888, a severer attack than usual occurred, accompanied by some jaundice, and she was then told by a doctor that she had gall stones. When I first saw her these symptoms were not particularly urgent, and she underwent an anti-syphilitic course of treatment on account of some tertiary manifestations, but as she improved under this treatment, the dyspeptic symptoms became aggravated; however, no hepatic enlargement, cystic distension, or tumour could be made out, and no gall stone was ever detected in the motions; the main symptom was pain in the right hypochondrium, and occasionally an icteric tinge was observed. At this time, bearing in mind the possibility of the symptoms being due to the presence of a gumma in the liver, I persisted with anti-syphilitic treatment longer than was actually necessary for the relief of the skin eruptions; by October, however, the attacks had become more frequent and more severe, and they culminated in

an illness lasting more than ten days, marked by frequently recurring paroxysms of pain and by vomiting, but still without any signs of obstruction of the bile ducts. The sickness was relieved by bismuth, and the pain eased by morphine suppositories. At this stage, although the diagnosis was by no means certain, I recommended abdominal exploration, and after a consultation with Dr. Way, I obtained the consent of my patient, having fully explained to her the immediate risks, and the remote possible inconveniences of a cholecystotomy.

On October 9th she was operated upon at the Private Hospital, when I had the kind assistance of Drs. Way and Davies Thomas. The incision was made close and parallel to the costal margin, and the gall-bladder, though not distended, was easily reached, and stones were at once detected in it, though none could be felt in the ducts. The gall-bladder was drawn out of the wound and incised, the shoe-horn instrument being used to prevent the biliary fluid it contained escaping into the abdominal cavity. About a dozen stones were removed with the finger and the ducts again explored externally. The walls of the gall-bladder, which were much thickened, were then attached to the skin in the usual way. The immediate progress was most satisfactory; the temperature scarcely rose above normal, and the quantity of bile discharged was very slight, and patient only complained of dragging pain in the wound, especially when coughing. In less than a fortnight she left the hospital, and in a month she had partially resumed her employment, which, however, she was obliged to relinquish on account of symptoms connected with the climacteric. On November 25th the discharge ceased and the wound appeared to be closed, but on December 8th there was again a clear mucous discharge from a minute orifice in the scar, and two days later a little bile was noticed; the former pains attributed to indigestion returned, and for ten days more there was a constant and profuse white discharge, only occasionally tinged with bile. On December 20th the motions were noticed to be clay-coloured, and bile was discharged through the sinus in abundance, and the pain was felt more severely.

On the 23rd the discharge of bile ceased quite suddenly, the motions became coloured and a gall-stone was discovered in them; thereupon the sinus healed up, and no trouble has since occurred. The scar is now sound, but when standing up the patient notices a bulging above it which disappears on lying down.

This case illustrates a further stage in the very rapid evolution of the modern operation of cholelithotomy (for I think it is desirable to adopt this name in contra-distinction to chole-cystotomy, just

as we speak of lithotomy for stone in the urinary bladder, and of cystotomy when referring to operations upon the urinary bladder for other causes than stone) and, possibly, we have reached the last stage, when we explore the abdomen and open the gall-bladder, where there is only a suspicion of calculus, and where no tumour, and no evidence of obstruction of the ducts, exist.

The only surgical point to which I would refer is the question as to which incision is the better: the vertical or the transverse. The former is said to be recommended by Lawson Tait, and has the sanction of Greig Smith, as the preferable incision, although no reasons for this preference are assigned; but if I had a similar case to deal with, I should again employ the transverse incision if no tumour could be felt.

A point of pathological interest is the question as to the source from which the stone was derived which caused the symptoms subsequently to the operation. The gall-bladder was not loculated, therefore, I do not suppose it could have been left behind at the time of the operation. Could it have formed in the gall-bladder during the 10 weeks which elapsed from the time of the operation to its passage down the duct? My own opinion, based upon what I have seen occur in connection with the urinary bladder, is that such a concretion could so form in that space of time.

#### A CASE OF SARCOMA OF THE LUNG, THE SYMPTOMS OF WHICH CLOSELY SIMULATED THOSE OF PULMONARY ECHINOCOCCUS.

BY J. DAVIES THOMAS, M.D., F.R.C.S.E., &c.,  
PHYSICIAN TO ADELAIDE HOSPITAL, AND  
JOINT LECTURER ON MEDICINE, ADELAIDE  
UNIVERSITY.

Miss L —, aged 32, unmarried, consulted me on December 4, 1888. Her family and personal health had been good with the exception that, eighteen months ago, her right foot had been amputated for sarcomatous disease.

The stump was now perfectly sound and no trace of enlargement could be discovered externally.

The illness for which she now consulted me began in July 1887, when cough and blood-spitting came on; these symptoms have continued up to the present time, but there has been no material loss of flesh, and she has never expectorated any hydatid membranes; she, however, produced in a small bottle, a small piece of solid substance, which she thought might be a fragment of hydatid skin, but which appeared to be a

blood-cast of a bronchial tube. She said that she did not get feverish towards evening, and that night sweats were not noticed by her. When first seen by me she was well-nourished, but coughed almost incessantly during my examination; there was, however, but little expectoration, and this consisted of mucus freely streaked with bright blood. The temperature was normal.

*Physical examination.*—Dec 4, 1888. Left chest: There was great deficiency of expansion over the whole of this side, especially well marked over its lower half—front and back. Below the second rib in front, absolute dulness reaching down to the eighth rib, below this tympanitic resonance (stomach); in the left axilla dulness from its top down to the same level as the dulness in front; behind, the percussion note was comparatively dull, but with a tympanitic character as far down as mid-scapula; below this, absolute dulness down to the extreme base except over a limited area near the spine, and below the level of the angle of the scapula; above the second rib in front, tympanitic percussion note. Auscultation left chest: Above the second rib in front, and therefore over the area of tympanitic resonance, the respiratory murmur was feeble, but not otherwise altered; below the second rib over the region of total dulness there was no sound audible; in the axilla feeble respiratory murmur, somewhat bronchial in character above and silence below. Behind, feeble respiratory murmur over the area of tympanitic percussion note, with absolute silence over the region of dulness. The vocal fremitus was so weak, even on the right, that no inference could be drawn from its absence on the left side. The heart was notably displaced to the right, for its right limit was ascertained to lie in the fourth and fifth interspaces, just at the edge of the sternum; there was also marked epigastric pulsation; it was thought, also, that the left apex beat, could be defined about half-way between the left edge of the sternum and its normal site.

*Right chest.*—At my first examination nothing abnormal except puerile respiration could be discovered. It was evident from the physical signs already described, that there was in the left lung a tumour which caused the heart to be notably displaced to the right, and which left certain parts of the affected lung uninvaded, but still considerably compressed, viz., the apex both in front and behind, as well as a patch near the spine posteriorly. There was no discoverable cachexia, and when first seen by me, no sign of disease in the right lung; a certain amount of pain was complained of in the left chest, but this gave no substantial aid to diagnosis. The diagnosis lay practically between an unruptured

hydatid of the lung and a solid tumour—if the latter, it was likely to be sarcomatous and secondary to the former disease in the foot.

I must confess that I was of opinion that the case was probably one of echinococcus of the lung, and I was led to this opinion principally by the following considerations.

1. The tumour in the left lung was of large size, for it occupied fully the lower half of the lung, and yet there were no evidences of disease in the right lung; it seemed probable, that if the disease were malignant and secondary, the other lung could hardly fail to show some signs of disease, when the left one was so extensively involved.

2. The general condition of the patient was relatively good. It was decided to make an exploratory incision to the pleura; to puncture in order to ascertain the presence or absence of hydatid fluid, and to act according to circumstances.

I adopted this course because if the disease were hydatid, it would be a large unruptured cyst, and it might be necessary to evacuate its contents quickly to prevent suffocation after puncture.

When the pleura was exposed a small trocar was inserted, and a small quantity of serous fluid (supposed to be hydatid fluid) escaped. This was soon followed by liquid blood. Two loops of silk were passed through the surface of the lung to secure it, and a small incision was made between them. A considerable quantity of partly coagulated and partly fluid blood escaped as well as a few decolorized clots. The finger was passed into a ragged cavity contained in the lung, but no hydatid membrane could be discovered. It was clear, therefore, that the cavity was a large hæmorrhagic focus excavated in the diseased lung. The external wound was plugged to check the somewhat alarming bleeding, which evidently oozed from the walls of the cavity and not from the incision into it. The usual antiseptic dressings were applied, and no serious bleeding took place externally up to her death six days later.

The subsequent history of the case was briefly as follows:—The temperature continued normal for four days, but on the morning of that day it rose to 108, and it afterwards fluctuated between 101.4 and 102.4. The patient became rapidly weaker, tubular breathing was heard in the left supra-clavicular region and over the first rib on the fifth day, and now for the first time coarse crepitation with patches of tubular breathing were heard at the extreme right posterior base, but no area of dulness could be defined. The patient died on the forenoon of the sixth day without any new symptoms.

*Autopsy six hours after death.*—The body was still warm, the weather being excessively hot. There was a very abundant panniculus adiposus, and the body was generally well nourished. In the left lung there were in the upper lobe about half-a-dozen nodules of about the average size of a broad bean. At the base of the lung near its centre was a large nodule of about the size of a small apple. It was almost entirely imbedded in the substance of the lung, but it projected near the posterior edge, and on the under surface of the base. The heart was displaced to the right, and lay principally underneath the sternum. The left lung was universally adherent to the chest-wall, and was considerably enlarged. It was removed *en masse*; it was then found to be infiltrated with malignant growth, with the exception of a small piece at the apex and a portion near the base. Upon section it was found to have broken down in several places into cavities filled with coagulated blood. One of these had been opened at the operation, but still contained much coagulated blood. Several masses of malignant disease remained solid, but exhibited smaller hæmorrhages and commencing softening. The other organs were not examined.

#### PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners by the respective Boards:—

##### NEW SOUTH WALES.

Magill, Martin, M.B. of Ch. B. Melb., 1887.  
Sturt, Clifton, L.R.C.P. Edin., 1889; L.R.C.S. Edin., 1889; L.F.P.S. Glasg., 1889.  
Orr, Herbert Holmes, M.B. of Ch.B. Univ. Dub., 1888.  
Newland, Edward Oriel, L.R.C.P. Lond., 1889; M.R.C.S. Eng., 1889.  
Wright, Thomas Cole, M.B., M.S. Univ. Edin., 1868.  
Hare, Richard Isaac, L.R.C.P. Edin. 1871; L.F.P.S. Glasg., 1871.  
Elliott, Nicholas Phillips, M.R.C.S. Eng., 1880; L.R.C.P. Edin., 1883.

##### NEW ZEALAND.

Copland, George Anderson, M.B. Univ. N.Z., 1889.

##### SOUTH AUSTRALIA.

Hynes, Timothy Augustine, M.B. of Ch.M. Ed., 1888.  
Mackay, Edward Alan, M.B. Melb., 1888.  
Wright, Robert L., 1882; L. Mid., 1883; R.C.S. Irel. L. & L. Mid. K.Q.C.P. Irel., 1883.

##### TASMANIA.

Meyers, Herbert Henry, L. & L. Mid. B.C.P. Edin., 1881, M.R.O.S. Eng. 1881.

##### VICTORIA.

Houston, Robert Wilson, M.B. of Ch.B. Melb., 1889.  
Willmot, Robert, F.R.C.S. Edin., 1883; M.R.O.S. Eng., 1883; L.S.A. Lond., 1885.  
Anderson, Thomas Cochrane, M.B. of Ch.M. Aberd., 1882.  
Harkin, Charles Fitzmaurice, M.B. of Ch.M. Dubl., 1883.  
Keogh, Eustace Julien, M.B. of Ch.M. Edin., 1883.  
McWilliams, George Frederick, M.B. of Ch.M., Melb., 1889.  
Massey, Harry Massey, M.R.C.S. Eng., 1882; L.R.C.P. Lond., 1882.

##### WESTERN AUSTRALIA.

Mountain, William John, M.R.C.S. Eng., 1886.  
Sloan, Arthur Edward, M.B. of Ch.M. Edin., 1887.

## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castlereagh Street, Sydney.*

*\*\* Contributors can have their Papers reprinted and published in Pamphlet form, at Cost Price, if the necessary instructions are given to the Publisher at the same time the contributions are sent in.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, JUNE 15, 1889.

## EDITORIALS.

## THE CASE OF ERNEST BÜTTNER.

THIS case is of so remarkable a character that we think it our duty to bring it under the notice of our readers as one of especial interest to the profession in a medico-legal sense. This young man was convicted, at the May Circuit Court, Sydney, before Mr. Justice Foster, of rape upon Jessie Lennox, a girl of eighteen. The evidence was so apparently conclusive that the jury, with but very little deliberation, brought in a verdict of guilty, and he was sentenced to death. The case having been considered by the Executive Council, it was decided that the capital sentence should be carried out, and the date of his execution was fixed. The case attracted the attention of the police authorities in Queensland, who communicated with the Government of New South Wales, giving certain particulars as to the history of the girl who had arrived from Brisbane but a day or two before the alleged offence was committed, and who had taken up her residence temporarily at the house of the accused, who kept a lodging house or restaurant in Erskine-street, Sydney. But for this communication from Queensland, there is no doubt but that the prisoner would have been hanged, and a terrible judicial murder committed, for until further searching enquiry was made, the circumstantial evidence was so apparently incontrovertible as to leave no doubt of Büttner's guilt.

The case as presented to the jury was as follows:—The girl had retired to her room about 10 o'clock, and was in bed about fifteen minutes after. Büttner entered in his shirt, pulled the covering off her, placed a mattress on the floor

in the middle of the room, and had connexion with her, she says in her evidence "against my will." She stated that she struggled with him, and cried for assistance, but subsequent enquiry seems to show that no cries were heard until about ten minutes past eleven, more than three quarters of an hour after Büttner had entered the room, when two men who occupied an adjoining room were disturbed by cries for assistance from that of the girl. About ten minutes later cries from the same woman were heard under and outside their window, and she was seen on the roof of a shed beneath, dressed only in her chemise, which was stained with blood. After the first connexion, on his proposing a repetition, she says:—"He released me when he said so, I jumped up and got out of a window on to a lean-to roof about five feet below the window and screamed for assistance." She was seen and heard by a number of people in this situation, and was helped from the roof by a constable and two or three other men. The girl was examined by a medical man in less than four hours after the commencement of the affair, and his evidence is as follows:—"I examined her and found the genitals covered with blood, the innermost part of the top of both thighs covered with blood. There was a clot of blood between the lips. Upon separating the lips I found the entrance to the vagina torn, gaping, and bleeding. *The hymen was completely ruptured.* From the condition of the parts I am of opinion that sexual intercourse had been effected with considerable violence at a very recent date. There was a mark on the shoulder as if caused by pressure. The chemise was covered with blood, both on the front and back parts. The blood came from the vagina. Great violence must have been used. The mark was on her left shoulder." (Examined by Mr. Crick, Büttner's attorney.) "It does not take much pressure to cause a mark on a woman's skin." (By the magistrate.) "*It was the first connexion.*" The case as thus submitted, without the light thrown upon it by the subsequent inquiries made by a commission specially appointed by the Executive Council, consisting of the Medical Adviser to the Government, Dr. F. N. Manning, and the Comptroller General of Prisons, Mr. Maclean, appears plain enough and thoroughly conclusive of the man's guilt. The enquiry by these gentlemen, however, happily showed that even this apparently damning evidence was compatible with an ordinary sexual connexion with consent, and by their recommendation the prisoner, who had been reprieved from death, was released from prison.

Information sent by the police in Queensland went to show that the girl had been some two years



in that colony, during the latter twelve months of which she had been confined in a lunatic asylum. That prior to this the police had known her as a flighty, somewhat noisy, careless-mannered girl, much given to the company of young sailors of the better class and the lower sort of male theatrical people, and from this they inferred she was morally loose, but of this they had not any other evidence. On her discharge from the asylum she made her way to Sydney, and since her sensational adventure she has been in domestic service in places procured for her. From the first she was discharged because she was Jessie Lennox, but we hear she is still in the other, industrious and well thought of by her employer. She, when examined by the Commissioners, said: "I did not consent. *He never asked me.* I do not know but I might have done if he had. When in the asylum I know I got the character of having been on the town, and I thought when I came to Sydney I might as well earn it, and he might as well have it as anyone else." She strongly asserted that she had never previously had sexual intercourse. And we are of opinion that the balance of evidence educed not only at the trial but at the subsequent enquiry, decidedly preponderates in favour of her previous chastity as against her previous impurity. This is strongly shown, we think, by her conduct when in the room with Büttner. There can be no doubt that the intercourse which produced such considerable local injury was accomplished with her consent, for though she denies giving consent in so many words, she apparently did not realize that in a case of this kind, above all others, the old proverb is superlatively true, that "Silence gives consent," and the evidence shows that though Büttner was in the room with her for three-quarters of an hour she made no outcry until he proposed to repeat the act, which had first occurred within fifteen minutes of his going to her room. Then, apparently, her experience of the first induced her to energetically refuse. We think that the consent to the first, and the refusal of the second, is strongly in favour of her having been previously chaste, for had she not been so—if she had intended to refuse at all—she would have done so at the beginning; as it is, she appears to have consented to the first, but when having found from the pain that it caused, which must have been very considerable, that "the game was not worth the candle," she acted on her newly found knowledge and strenuously refused consent to the proffered renewal. The special point in the evidence which made the guilt of Büttner so apparently indisputable, was the apparent sincerity of her resistance, as shown by her leap from the window, the evidence of physical injuries to the

genitals adding additional force to this incident. The medical man who examined the girl has been subjected to much adverse—and, we submit, entirely unjust—criticism, as to the evidence he gave, founded on his examination of the parts. We believe our readers will agree with us in thinking, that the injuries he found quite justified him in expressing his opinion that the intercourse which produced them was "the first" the girl had had, and that "great violence must have been used." It is to be regretted that he stated "the hymen was completely ruptured," for though, in all probability, the inference that this was accomplished on this occasion is strictly true, yet it might have been more prudent on his part not to have testified to the destruction of so very evanescent a thing, which, when destroyed, leaves so little trace behind. We press this on the attention of our professional brethren, for we think it is the sole duty of a medical man, when called as a witness, to state accurately the physical signs which he finds on examination, leaving the inferences founded on these facts to be given merely as opinions elicited from him on examination. No one can dispute that when sexual intercourse is accompanied by such extensive injury to the female genitals, as in this case, the fair inference to be drawn from it is that the intercourse was the first the woman had had, and this being the case, it follows that if the hymen existed it was then, and by it, destroyed.

Popular rumours, with regard to this case, are most misleading, and the more ill-informed people are especially emphatic in their condemnation of the medical man who gave evidence. Statements have even been freely made that the girl had previously been a prostitute, and had had a child, but there is, we are informed on the best authority, no good ground for such statements.

#### THE HOSPITAL SYSTEM IN AUSTRALIA.

In our January issue an editorial on the above subject has evoked sundry letters and criticism, to which it seems advisable to reply. It appears that New Zealand has in Dr. McGregor a Medical Inspector of Hospitals and Charitable Institutions, but his functions and authority are not up to the standard that we suggested; and although the position he occupies is at present a unique one in the Australian Colonies, it might be rendered doubly useful were his power increased in the way we indicated, namely, in giving him a voice in the election of resident surgeons. We hear also from Queensland, that Hospital Committees are controlled by the Government to the extent of withdrawing

the subsidy in cases of incompetent surgeons or unqualified men, for, quite recently, an unqualified man was appointed to a Queensland Hospital, and it was only by a threat to stop the subsidy on the part of the Government that the Committee was induced to see the error of its ways. Were a further argument in favour of Inspection of Hospitals by Medical Inspectors needed, this surely would be conclusive; and indeed, from the tenor of our correspondence on the subject, such inspection would meet with the approval of a large majority of the profession. For it is the incompetent and not the competent man who would suffer, but this, at the present time, is unfortunately reversed by the authority assumed by laymen in giving opinions in committee on what should be purely professional subjects. "Hospital Reform" in a lengthy letter published in our February number, puts forward a system by which he would limit the tenure of resident surgeoncies. We are at one with him so far as the larger hospitals are concerned, although we cannot agree that remaining resident surgeon of a large institution would dry-rot a man, indeed, we believe that the reverse would obtain, and that several, say three years, in charge of an important hospital, eminently fits a man for the higher branches of his profession. Still it would be better for the profession generally, were junior men appointed as residents under the supervision of such an honorary staff as most of our large towns could provide; better for the profession since it would procure suitable work for newly fledged graduates; better for the public since junior men would gain that experience which can only be obtained by a close observation of treatment of disease by those whose practice has been longer and more varied than that seen in Medical Schools. Another point on which we would join issue with "Hospital Reform," "is that preference should be given to Australian graduates; surely the older men who have borne the heat and burden of the day, and who, although possessing home qualifications, have practised in the Colonies for years, are entitled to equal consideration except for junior residencies; in these certainly let the native talent have preference over new comers, but be it remembered that that very native talent itself was educated by those whose qualifications were British. We think that adequate inspection would prove more efficient than limiting the tenure of Hospital appointments as advocated by "Hospital Reform." His experience seems to have been of large towns, and so far as they are concerned we perfectly agree with him, but our desire is to urge reform where most needed, which is in those districts where a scattered population renders the

medical practice a matter of hard and ill-paid labor, and in which, if the standard could be raised, infinitely more good would be effected than in large towns where competition ensures more than one highly-qualified man. Of course we do not go back from the position we took up as to the benefit to be derived from making resident surgeoncies purely Government appointments, and we maintain most strenuously that a permanent medical service on these lines would advance science in every way, and, if under a competent head, might, in each colony, be the means of formulating particulars of diseases and methods of treatment, the publication of which would be of incalculable benefit to the profession at large. In any case, we claim that the time has come for the appointment of Medical Hospital Inspectors; that they are urgently needed; and that their creation would be acceptable to medical men. That they would do good work and benefit their fellow-colonists is as undoubted as is the fact that the present system is incomplete and saddled with many abuses. Lastly, a more uniform set of bye-laws might be framed to suit large institutions, and prevent such an anomaly as that pointed out by Mr. J. Carnegie MacMullen, whereby the Melbourne Hospital differentiates between M.R.C.S.E. and L.R.C.S.I.—a distinction which is purely fictitious so far as their relative value is concerned, and, indeed, reflects on their most distinguished surgeon who, until 1884, held only the latter qualification; yet no one would be so venturesome as to assert that Mr. T. N. Fitzgerald is not a man of whom any country might be proud, and who, as a surgeon, is surpassed by none either in Australia or Europe. Still, we do not propose to enter into the subject of qualifications which may form the matter of a future article. What we wish to bring forward is the necessity for hospital reform, and this we are of opinion would be effected in some great degree by regular inspection by medical men specially selected for their experience in hospital work. Lastly, with "Hospital Reform," we would urge upon those in authority in the larger hospitals to render them more suited to educate the junior men by abrogating the powers of Resident Surgeons to the advancement of those gentlemen who, for love of their work, give their services to institutions whose controllers are, in many instances, the last to thank them. Perhaps the first step in the right direction would be for every honorary surgeon to be *ex officio* a member of the hospital committee, but it is doubtful if any good can be done unless the subject be taken up by the various Colonial Governments. To them we would once more suggest the appointment of Medical Hospital Inspectors.

## CARBOLIC ACID DISCARDED AS A DISINFECTANT.

At the instance of the New South Wales Board of Health, we publish the subjoined letter from Dr. Buchanan, the Medical Officer of the Local Government Board, London. It is of importance and interest as showing that Carbolic Acid has ceased to be recognized as a disinfectant by that body.

Dr. Buchanan to the Crown Agents,  
Local Government Board,

London, 2nd January, 1889.

Gentlemen,—In reply to the enquiry you made on behalf of the Government of Antigua, as to the value of Carbolic Acid as a disinfectant, I send you two papers issued by this Medical Department in the years 1866 and 1888 respectively. In the earlier one you will find respectful mention of Carbolic Acid and other substances as useful disinfectants, but no mention whatever of them in the later paper. The reason for the difference is to be found in the study, which has now for some years been made for the Department, of the value of various substances as disinfectants. This value has been measured not by the power of the several agents to overpower or remove smell, but by exposing the actual material of various infections to the influence of the reputed disinfectant; and thus it has come about that, for purposes of real and valid disinfection, heat, perchloride of mercury, and sulphurous acid are alone enumerated in the later memorandum. For an account of the steps by which this result has been obtained, I would refer to the more recent reports of my Department, in which also some experiences will be found on the practical application of the principles of heat disinfection.

I have, &c.,  
(Sgd.) GEORGE BUCHANAN.

## THE PATHOLOGY AND CURE OF SNAKEBITE.

WE desire to call the special attention of the profession to Dr. Müller's papers on this subject, published in our issues for November, December, February, April, and May last, and to press upon them the justice, and, we submit, the necessity, of extremely careful consideration of his theory, and of the results shown in the cases in which, acting on it, he has used hypodermic injections of strychnia for the treatment of snakebite. We formerly expressed our concurrence in the opinion of Sir Joseph Fayrer, who said: "I do not say that a

physiological antidote is impossible. All I assert is, that it is not yet found." Now, we are, indeed, pleased to say that we believe such an antidote is now found and that Dr. Müller is the happy discoverer. We are of opinion that his theory as to the pathological changes set up in the human system by the injection of snake poison is a sound one, and that the treatment he has suggested and used is correct and proper, and the one most likely to avert death in cases of snakebite, which would otherwise, in all probability, prove fatal. We, therefore, press the use of hypodermic injections of strychnia in the manner described by him, upon the attention of practitioners who may have to treat cases in which the symptoms present are the result of snake or dangerous insect poison, and think that should the patients die without it having been used, all will not have been done to save life that might have been.

## THE LAY PRESS ON MATTERS MEDICAL.

THE following paragraph, which we republish from the *Richmond* (Victoria) *Guardian*, is a typical specimen of the sense of right and wrong of the average lay editor when dealing with matters medical, of which he possesses—as a rule—no exact knowledge, and of which he is so ready to pass an apparently *ex cathedra* opinion, without possessing even the general knowledge which would entitle him to do so. The tardy apology, given under the threat of legal proceedings, requires no comment from us, except to call attention to the naive admission of the editor that the inadequate reparation made is not the result of repentance, but to avoid the threatened retribution by the libelled surgeon.

This is the paragraph referred to:—

"We, last Saturday, received a communication from Messrs. M'Kean and Leonard, solicitors, on behalf of Dr. Elsner, who objects to a statement in our paragraph respecting the cause of death of Mrs. George White. His explanation is as follows:—"I attended the late Mrs. George White for diphtheria, and duly reported the case, as usual. The day of her death (Tuesday, 26th), her breathing became greatly oppressed, and she was in imminent danger of suffocation. I proposed tracheotomy, which her husband approved of, and—Dr. Hayes having been summoned to assist—the operation was successfully performed, and the patient recovered immediately from the chloroform, and made signs of gratitude for the relief given. Unfortunately, the trachea then began to fill with mucus and fluid, imperiling the patient's life once more, and, on this, I—at the risk of my own life—sucked the fluid from the tube, and gave momentary relief, when—a few minutes later—the patient fell back dead, the death being due to

paralysis of the heart, a formidable lethal agent in diphtheria, which could not have been foreseen. This patient, then, had not suffered from 'quinsy,' an affection for which it is not necessary to give chloroform, nor yet to operate, but from true diphtheria, which caused her death, as stated in my certificate, and as Dr. Hayea is ready to testify, if required." We accept Dr. Elaner's correction that the ailment was diphtheria, not quinsy, and, if any unpleasantness has been caused that gentleman, we regret it."

## LETTER TO THE EDITOR.

### SNAKE POISON.

(To the Editor of the A.M. Gazette.)

SIR,—I have read Dr. Müller's reply to my letter on the above subject, and, apart from personalities and bad temper, which might well have been spared, I can see nothing calling for comment by me. Perhaps I may be excused for referring him to Harley, "The old vegetable Neurotics, pp. 303-309," and asking him to read the same carefully, in order to judge accurately if any analogy exists between Opium and Belladonna on the one hand, and Snake poison and Strychnia on the other. The question—so far as I am concerned—must be left to the verdict of the profession and time. (Excuse the expressive term.)

Yours, &c.,

34 Collins Street, JOHN REID, M.A., M.D.  
Melbourne, May 20, 1889.

## BOOK NOTICES.

THE ART OF DISPENSING (2nd Ed.) Published at the Offices of the *Chemist and Druggist*, London and Melbourne, 1888. Sydney: L. Bruck. Price, 5s.; by post, 5s. 6d.—This small treatise of 280 pages has been prepared in the editorial department of the *Chemist and Druggist* newspaper, and, as its first edition was bought up in three weeks, we may conclude that it fills a place in pharmaceutical literature. It is, of course, to pharmaceutical students that the book will be of most service—it is specially addressed to such. But, in a country like Australia, where so many medical men must perforce undertake more or less of dispensing the medicines they prescribe, such a book will doubtless prove serviceable in strengthening what is too often one of the weak points in a modern medical training. Of course, no book can possibly give dexterity, but common sense, accuracy, and the aid of a new hand-book like the present, should enable the practitioner to become, if required, an efficient enough dispenser. And, further, the prescriber in general may gather many valuable hints by assuming, as a reader of this manual, the point of view of the dispenser, an attitude only too frequently ignored by medical men.

HANDBOOK OF THE DIAGNOSIS AND TREATMENT OF SKIN DISEASES. By A. Van Harlingen, M.D. Second Edition. 410 p. Philadelphia: Blakiston, Son & Co., 1889; Sydney: L. Bruck. Price 12s. By Post, 12s. 9d.—The author, who is Professor of diseases of the skin, in the Philadelphia Polyclinic, and Clinical Lecturer on Dermatology in the Jefferson Medical College, U.S.A., in writing this book, evidently had in mind the wants of the busy practitioner, and by adopting the alphabetical plan of arrangement, has succeeded to make it useful as a work of ready reference. The description, diagnosis, and treatment of the various affections of the skin are fully, and yet concisely dealt with, and, as an aid to the diagnosis, eight full-page plates and other illustrations are added. The work is a valuable book of reference, and will be a great help to the general practitioner.

MANUAL OF DIFFERENTIAL MEDICAL DIAGNOSIS. By Condict W. Cutler, M.D., M.S., Physician to the New York Dispensary, Assistant Surgeon New York Hospital, and late House Physician, Bellevue Hospital. Second edition, 177 pp. New York: G. P. Putnam and Sons, 1888; Sydney: L. Bruck. Price, 7s.; by post, 7s. 6d.—In this little work, which did rapidly run through its first edition, the author has contrasted the symptoms of the diseases that are most liable to be confounded one with another, and he has chosen for such symptoms those that will most readily call forth a differential diagnosis, though to avoid any unnecessary multiplication of the pages, the author has limited himself to those symptoms that afford the most striking contrast. The book contains chapters on the differential diagnosis of the diseases of the mouth and throat, of the lungs and pleura, of the heart and blood-vessels, of the digestive tract and perineum, of the liver, kidneys, and bladder, acute general diseases, chronic general diseases, diseases of the nervous system, and on coma. The fact that a second edition has been called for so soon is proof that its merits have been appreciated by the profession.

KEY TO THE SYSTEM OF VICTORIAN PLANTS, by Baron Ferd. von Mueller, K.C.M.G., M. and Ph.D., F.R.S. 2 vols. Price, 5s. Melbourne: Govt. Printer, 1888.—This last work of the distinguished author consists of two handy volumes, the first of which, within a compass of 559 pages, gives a dichotomous arrangement of the orders, genera, and species of the native flora of Victoria, with annotations of their primary distinctions and supporting characteristics, and the second

part contains xylographic illustrations of 152 native plants and their organs. The work has been written for the use in elementary schools as well as in higher educational institutions, and it is also intended to serve both the amateur gatherer of plants during botanical excursions, and the professional investigator in the exercise of his duties. The author being such an eminent authority on the subject, the information, which is of much practical value, can be relied upon, and, doubtless, the work will be welcomed by those members of the profession who take an interest in the native flora.

### THE INSANE POPULATION OF NEW SOUTH WALES IN 1888.

DR. F. NORTON MANNING, Inspector-General of the Insane in New South Wales, has sent us his annual report for 1888, which shows that the number of insane persons under official registration at the close of 1887 was 2,821, and the number on the register on December 31, 1888, was 2,898, viz., 1,776 males and 1,122 females. The increase during the year was, therefore, 76, made up of 41 males and 35 females. This increase is below the average, which, for the five years ending December, 1888, was 99 per annum. The population of the colony on 31st December, 1888, was 1,085,356, and the proportion of insane to population was therefore 1 in 374, or 2.67 per thousand. The ratio of insanity was less among women than men, being 1 in 433 of the former, and 1 in 337 of the latter. Although the insane population of the colony is rapidly increasing, and has indeed doubled since 1872, there has been no increase during the last 16 years in the proportion of insane persons to the general population. From 1872 to 1881 there was a slight increase, but since that time the proportion has fallen, and is now exactly what it was in the years 1871 and 1872. The total number under care during the year was 3,460 (2,137 males and 1,323 females), including 529 admitted for the first time, 59 re-admitted, and 51 transferred during the year. Of the total number under care, 275 recovered, 81 were relieved, 51 were transferred, 5 escaped and were not re-captured, and 200 died; therefore there remained 2,898 insane persons in the asylums at the close of last year, but the average number resident during the year was only 2,815. The principal causes of insanity of the 588 persons admitted and re-admitted during the year are stated as follows:—74 are ascribed to intemperance, 33 to previous attacks, 31 to epilepsy, 30 to old age, 25 to adverse circumstances, 25 to mental anxiety and overwork, 25 to hereditary influence, 24 to accidents or injuries, 24 to the puerperal state, 17 to religious excitement, 17 to domestic trouble, 15 to chronic ill-health, 13 to sunstroke, etc.

Of the 3,460 persons under care during the past year, 1,532 belonged to the Church of England, 1,284 were Roman Catholics, 197 Presbyterians, 103 Wesleyans, etc. As regards their native countries, 1,017 were natives of N.S. Wales, and 126 of the other colonies, 922 came from Ireland, 852 from England, 172 from Scotland, 85 from Germany, 78 from China, and 208 from other countries. The most noticeable fact in connection with the nationality of the patients under care, is the steady rise in the number and proportion of those born either in New South Wales or in the neighbouring

colonies in the ten years from 1879 to 1888. The number of those of Australian nationality rose from 634 to 1,143, or nearly doubled; whilst those born in Great Britain and Ireland only increased from 1,575 to 1,946, or considerably less than 25 per cent.; and those of foreign nationality, including France, Germany, China, and other countries, from 260 to 371, or less than 50 per cent.

The total expenditure was £89,895 19s. 1d., and the receipts of the department from all sources amounted to £10,949 9s. 5d. The average weekly cost per head at all the hospitals was 11s. 8½d. without deducting collections, and 10s. 2d. collections being deducted, whilst the cost in 1887 was 11s. 11½d. and 10s. 6d. respectively.

## THE MONTH.

### NEW SOUTH WALES.

FROM a return prepared by the Board of Health with reference to typhoid fever in Sydney and the suburbs, it appears that during the 10 years ended December 31, 1888, there was a large increase in the mortality from this disease, viz., from 46.07 per 100,000 in 1876 to 102.17 in 1888. During the three years 1886, 1887 and 1888 there was a considerable and progressive diminution. In 1886 the rate per 100,000 was 90.90; in 1887 it was 58.14; and in 1888 it was 51.42. In 1886 there were 814 cases of typhoid admitted to the metropolitan hospitals, with 128 deaths; in 1887 there were 598 cases, with 81 deaths; and in 1888 there were 648 cases with 82 deaths, the death-rates being 15.72, 13.54, and 12.66 per cent. on cases admitted during each year respectively.

A COTTAGE HOSPITAL, with twelve beds, was opened at Moree on April 9th. Dr. H. Lilie is Visiting Medical Officer.

It is proposed to establish an Inebriates' Home in Sydney.

WE regret to have to announce the death of Dr. Thomas Nott, M.D. Aberd. 1844; M.R.C.S. Eng. 1844; L.S.A. Lond. 1842, an old colonist of 20 years' standing, who died at his residence, Ocean-street, Woollahra, near Sydney, on May 15, aged 68 years. The deceased gentleman possessed an engaging manner which endeared him greatly to his patients, and his loss is deeply felt by a wide circle of friends.

DR. CHARLES FISHER CRIPPS, M.D. Columbia College, New York, 1882, late of Rockhampton (Qu.), died of hæmoptysis, at his residence, Elizabeth-street, Sydney, on May 19, in his 44th year.

MR. H. M. HART, chemist, of Oxford-street, Sydney, has been committed for trial for the manslaughter of a female child, which died from an overdose of morphia, prescribed for her by Mr. Hart.

DR. M. L. BUTLER has removed from Burrows to Oberon, on the Fish River Creek, 136 miles W. of Sydney.

DR. P. J. DROUGHT has removed from Ivanhoe to Crookwell, in an agricultural district 160 miles S. of Sydney.

DR. H. W. GARDNER has been appointed a member of the Licensing Court for the district of Coonabarabran.

DR. W. F. GARRETT has commenced practice at St. John's-road, Forest Lodge, a suburb adjoining Sydney.

DR. W. H. GOODE has been elected Honorary Surgeon at the Sydney Hospital, vice Dr. Woodward, resigned.

DR. J. T. HEELEY, J.P., has been appointed a member of the Licensing Court for the district of Young.

DR. C. W. HEINEMANN has removed from Orange to Wellington.

DR. J. N. E. MCLENNAN, late of Prince Alfred Hospital, Sydney, is now practising at Casino, on the Richmond River, 385 miles north of Sydney.

DR. F. C. STEVENSON, of Scone, has been appointed member of the local Licensing Court.

#### NEW ZEALAND.

At a recent meeting of the trustees of the Thames Hospital, Dr. Williams tendered his resignation as resident surgeon, which step was taken in consequence of antagonism met with from the medical profession, owing to the 5s. out-patient system in force at the Thames Hospital, and the impossibility of obtaining any doctor to act in consultation with the resident doctor. In considering the matter, the trustees decided to revise the by-law dealing with the subject. After a lengthened debate it was resolved that in future the out-patient relief department be conducted as follow:—That the indigent sick be treated by tickets issued by the Charitable Aid Board, and also by ticket from subscribers, the latter class to pay 1s. per bottle for medicine. It was further decided that Dr. Williams be offered £300 per annum and residence, and that he have the right of private consultation outside the hospital. By this scheme the trustees will still retain Dr. Williams's services as resident surgeon at a cost of one-third less than the present salary (£450), and also overcome all objections now put forth by the medical profession. It was resolved to ask Dr. Williams to reconsider the matter and withdraw his resignation now that the by-laws have been amended and the 5s. out-patient system abolished.

DRS. H. C. BARCLAY and G. A. Copland, graduates of the University of New Zealand, have been elected Resident Medical Officers at the Dunedin Hospital.

DR. T. R. KING, on his retirement from the medical superintendency of Seacliff Asylum, Dunedin, to take charge of the Auckland Asylum, was presented, by the officers and members of the staff, with a handsome marble timepiece and an illuminated address, in token of the esteem in which he was held.

DR. A. C. PRESTON has been appointed a member of the Napier Medical Board, as provided for by "The Military Pensions Act," 1866.

#### QUEENSLAND.

At the sittings of the Supreme Court, held in Brisbane on April 9, Mr. Feez moved for an order *nisi*, calling upon the Queensland Medical Board to show cause why a writ of *mandamus* should not be issued, ordering the board to register Dr. William Conley Speece as a doctor of medicine and as a medical practitioner in Queensland, and to issue to him a certificate of such registration under the Medical Act of 1867. It was explained that Dr. Speece was a doctor of medicine of Starling College, Columbia, Ohio, U.S.A., and that he also possessed a certificate from the State of California, where he had practised. The Chief Justice stated that the court could do nothing in the matter, and the motion was dismissed.

ONE of the outbuildings of the Brisbane Hospital was destroyed by fire on May 30, but the flames were prevented from spreading to the adjoining premises. Fortunately, there was no excitement amongst the patients.

A COLLECTION is being made at Limestone, a new mining township situated forty miles from Maytown, in the Palmer district, for a local hospital. Already £250 have been subscribed, and the committee hope in a few months to have £1,200 to their credit. The population is at present about 400, but increasing rapidly, as the reefs, including the celebrated Anglo-Saxon, are looking splendid.

DR. J. L. CUPPAIDGE has removed from Roma to Toowoomba.

DR. G. S. L'ESTRANGE has succeeded to the practice of Dr. Cuppaidge at Roma.

DR. E. ST. GEORGE QUEELY has been re-appointed Surgeon to the Palmer District Hospital at Maytown.

DR. R. HANCOCK has removed from Brisbane to Southport, a fashionable watering place 46 miles S.E. of Brisbane.

DR. JOHN I. MOORE has settled at Springsure.

#### SOUTH AUSTRALIA.

In the Banco Court, Adelaide, on June 4, Mr. Symon, Q.C., moved for a rule *nisi* for a mandamus calling on the Medical Board to show cause why the name of Dr. George Bollen, medical practitioner at Port Adelaide, should not be placed on the Medical Register. He read affidavits just received from Chicago, U.S.A., setting out Dr. Bollen's qualifications, and stated that the Medical Board had declined, apparently out of mere prejudice, to place Dr. Bollen's name on the register. A rule *nisi* was granted, returnable in a few days.

DR. GEO. ADDISON, M.R.C.S. Eng. 1855, L.S.A. Lond. 1856, M.D. St. And. 1858, M.D. (*a.e.g.*) Melb. 1872, died at Tanunda on May 7, aged 61 years. The deceased gentleman arrived in Victoria in 1869, when he was appointed Resident Surgeon of the Melbourne Hospital; in 1874 he went to South Australia to take charge of the hospital at Mount Gambier, and a few years ago he removed to Mitcham where he practised his profession till last year when he became quite unable, from sudden and severe illness, to continue in practice.

At a special meeting of the Adelaide Hospital Board Dr. T. A. Hynes was appointed Senior House-Surgeon, and Dr. E. A. Mackay Junior House-Surgeon. Dr. Hynes is a South Australian by birth, who recently completed his University career in Edinburgh, and Dr. Mackay is a graduate of the Melbourne University.

DR. F. W. NIESCHE, M.D. Edin., of Adelaide, and Dr. T. A. Hynes, M.B. Edin., of the Adelaide Hospital, have been admitted to the same degrees *ad eundem gradum* at the Adelaide University.

On May 11 the principal residents of Jamestown and district assembled at the local Institute to say farewell to Dr. Pentland. Many complimentary speeches were made regarding Dr. Pentland. Dr. Pentland left for Europe by the "Parramatta" on the 20th May.

DR. W. B. AITKEN, late of the Adelaide Hospital, has commenced practice at Jamestown, 141 miles N. of Adelaide.

DR. W. BALY, of Yorketown, has been appointed a Justice of the Peace in South Australia.

DR. H. L. SOMMERVILLE has commenced practice at Elliston, on Waterloo Bay, 817 miles W. of Adelaide, via Port Lincoln.

#### TASMANIA.

DR. H. H. MEYERS, late of Rushworth (Vic.), has commenced practice at Green Ponds, 29 miles N. of Hobart.

#### VICTORIA.

THE Council of the University of Melbourne have decided that the chair of Anatomy and Pathology be divided into two professorships as soon as funds are available, and that the Government be asked to vote the sum of £1,000 for this purpose.

DR. SHIELDS, Government Medical Officer in Melbourne, has applied to the S. A. Central Board of Health for information in reference to the prevalence or otherwise of leprosy in South Australia. In reply he has been informed that no case of leprosy has, to the knowledge of the authorities, occurred in South Australia proper.

A SUSPICIOUS case of leprosy has been reported from Servicetown, on the South Australian border, the subject being a Chinaman.

DURING the fortnight ended May 23, 371 cases of typhoid fever were reported to the Central Board of Health in Melbourne, of which 47 cases were fatal; and of 95 cases of diphtheria 25 were fatal.

FROM the 1st December, 1888, to May 21, 1889 (inclusive), there had been recorded 4,624 cases of typhoid fever, of which 483 had proved fatal. The number of diphtheria cases during the same period had been 572, 181 of them proving fatal.

THE Central Board of Health have called upon the medical gentleman, practising at Ringwood, for an explanation as to why he had not furnished an immediate report on several cases of typhoid fever which had occurred at Ringwood.

THE Committee of the Women's Hospital have decided not to entertain the request for a reduction in the fees charged to students attending the practice of the Hospital.

DRS. F. J. DRAKE, E. L. Gault, F. H. Langlands, T. Murphy, and J. F. Rudall, graduates of the Melbourne University, have been elected Resident Medical Officers of the Melbourne Hospital.

AT the Williamstown Police Court the hearing of the charge against Dr. E. G. Figg, of Williamstown, of having performed an unlawful operation upon a widow on the 9th April last, was concluded on May 13; at its conclusion the chairman of the Bench, Mr. J. H. Alley, P.M., said that six of the honorary justices were for acquittal, but he took the responsibility upon himself of committing accused. At the Central Criminal Court, however, on May 29, Dr. Figg was found not guilty and discharged.

IN the St. Kilda police court, on April 21, Dr. Keogh, practising in that borough, was charged with a breach of section 9 of the Health Act of 1888. The facts were that he was called in to see a patient, that he decided the case to be typhoid fever, and that thereupon the patient was removed to the typhoid fever camp at the Alfred Hospital. He ought then to have immediately reported the occurrence to the Central

Board, but neglected to do so. Although the facts were clearly established, the Bench dismissed the summons. Some confusion seemed to have been raised by a reference to section 76 of the Act of 1883, which, under certain circumstances, required action on the part of the medical practitioner "in attendance," and it was apparently contended that Dr. Keogh was not "in attendance."

MR. HENRY MEYLER, L.A.H. Dubl, 1849, died at Winchelsea on the 11th May, aged 64 years; the deceased gentleman was a native of Dublin, and arrived in the colony 25 years ago, during the whole of which period he practised in the Winchelsea district.

DR. RODERICK AITCHISON, late Deputy Medical Superintendent of the Ararat Lunatic Asylum, has commenced practice at 55 High-street, Prahran, near Melbourne.

DR. T. C. ANDERSON, late of Huntley (Scotland) has commenced practice at Footscray, an industrial suburb four miles W. of Melbourne.

DR. G. P. ATKINS, late of Port Lincoln (S.A.), has commenced practice at Grace Park, Hawthorne, a favourite suburb of Melbourne.

DR. J. C. BAIRD has removed to Healesville, in a timber and hop-growing district, 38 miles E. of Melbourne.

DR. T. J. BARR, has removed from Castlemaine to Hawthorne, a fashionable suburb of Melbourne.

DR. A. C. BROWNLESS has been re-elected Chancellor of the Melbourne University for the ensuing year.

DR. W. H. CUTTS, sen., has returned to Melbourne by the R.M.S. "Carthage" from his trip to Europe.

DR. R. H. FETHERSTON, who has been performing the duties of Resident Medical Officer to the infirmary department of the Melbourne Women's Hospital temporarily since the resignation of Dr. Anderson, has been elected to fill the position.

DR. C. F. HARKIN, a new arrival, has settled at Wodonga, on an arm of the River Murray, 188 miles N.E. of Melbourne.

DR. A. HAYNES, late of Myrtleford and Benalla, has settled at Beechworth.

DR. R. N. JACK, of Stawell, has been appointed surgeon of the Victorian Rangers, with the relative rank of captain.

DR. G. F. MCWILLIAMS, a graduate of the Melbourne University, has commenced practice at Woodend, 49 miles N.W. of Melbourne.

DR. H. M. MASSEY, late of Wallsend (N.S.W.), has settled at Wycheproof, 191 miles N.W. of Melbourne.

DR. ROBT. MORROW, late medical officer of the Hillston Hospital (N.S.W.), has commenced practice at Myrtleford, 177 miles N.E. of Melbourne.

DR. J. R. M. THOMPSON, who has practised at York, Western Australia, for the last nine years, has commenced practice at Essendon, a suburb five miles N. of Melbourne.

MR. W. SHEPPERSON, the representative in Melbourne of Messrs. Burroughs and Wellcome, of London, has been the recipient of a handsome address on the occasion of his departure for England; the address was signed by Drs. Astles, Barrett, Jamieson, O'Hara, Springthorpe, and others.

## WESTERN AUSTRALIA.

DR. J. T. LAFFAN has been appointed to act temporarily as Resident Magistrate, the Magistrate of the Local Court, Chairman of the Court of General Sessions, and Sub-Collector of Customs and Internal Revenue, at Bunbury.

DR. W. J. MOUNTAIN has been appointed a Justice of the Peace, also Resident Medical Officer at Wyndham, Health Officer at the Port, and Public Vaccinator for the urban and suburban district of Wyndham and the rural district of East Kimberley.

WE are pleased to learn that the eminent services of his Excellency Dr. William McGregor, formerly Chief Medical Officer, Receiver General and Colonial Secretary, also for some time Administrator of the Government in Fiji, but now Governor of British New Guinea, have been fittingly recognized by his having been created a K.C.M.G.

## MEDICAL APPOINTMENTS.

Aitken, William Blair, M.R.C.S.E., M.B. & Ch.M. Glasg., to be a Public Vaccinator at Jamestown, S.A.  
 Baird, John Chalmers, M.B. Melb., to be Public Vaccinator for Healesville, Vic.  
 Connor, Francis Gillies, M.B. & Ch.M. Edin., to be Public Vaccinator for the district of Coraki, N.S.W.  
 Corry, Alexander, M.D. Roy. Univ. Irel., to be Public Vaccinator for Mount Egerton; also Health Officer for Ballan shire, Vic., vice Dr. N. Sless, resigned.  
 Donaldson, Henry, M.R.C.S.E., to be Honorary Surgeon of the Arrow Rifle Volunteers, N.Z.  
 Haynes, Abraham, L.R.C.P. & R.C.S. Ed., to be Public Vaccinator for Beechworth, Vic.  
 Henry, Thomas James, L.F.P.S. Glasg., L.R.C.P. & R.C.S. Ed., to be Government Medical Officer and Vaccinator for the district of Warialda, N.S.W.  
 Lloyd, Henry Sanderson, M.B. & Ch.M. Ed., M.R.C.S.E., to be Government Medical Officer and Vaccinator for the Police district of Ryde, N.S.W.  
 McCardel, Edward John, M.D. & Ch.M. Can., M.R.C.S.E., to be Health Officer for North Ovens shire, Vic., vice Dr. McFarlane, resigned.  
 Magill, Martin, M.B. & Ch.B. Melb., to be Government Medical Officer at Goondiwindi, Qu.  
 Massey, Harry Massey, L.R.O.P. Lond., M.R.C.S.E., to be Health Officer for Wycheproof district, Vic.  
 Money, Percy Frederick, M.R.C.S.E., L.R.C.P. Ed., to be a Public Vaccinator for the district of Black's, N.Z.  
 Nicholl, Edward Harvey Bird, L.R.C.P. & R.C.S. Ed., to be Government Medical Officer and Vaccinator for the district of Mudgee, N.S.W.  
 Nyulay, Francis Armand, M.B. & Ch.B. Melb., to be Public Vaccinator for Toorak, Vic., vice Dr. J. E. Usher, resigned.  
 Spark, Sidney Walter, L.R.C.P. & R.C.S. Edin., to be a surgeon on the Medical Staff of the Queensland Defence Force.  
 Sloman, Arthur Edward, M.B. & Ch.M. Edin., appointed Resident Medical Officer, Colonial Hospital, Perth, and Assistant to Superintendent of Vaccination in W. A., vice Dr. Harston, resigned.  
 Stook, William Henry, L.F.P.S. Glas., L.R.C.P. Irel., to be Public Vaccinator for Surrey Hills and Doncaster, Vic.  
 White, Arthur Thomas, L.R.C.P. & R.C.S. Edin., to be a Surgeon in the Western Australian Volunteer Force.

MR. BRUCK has just received a fine collection of new *Surgical Instruments*, and also a large assortment of the latest *Medical Books*. Mr. Bruck can now supply in any quantity those *Glycerine Syringes* for *habitual constipation*, glass barrel, vulcanite mounted, at 2s. 6d. each, or 12s. 6d. for half-a-dozen.

MR. BRUCK has in stock Dr. Weigert's *Hot-Air Inhalation Apparatus* for the treatment and cure of *Pulmonary Tuberculosis*; this method of treatment has now been successfully employed in 150 cases, 50 of which have been published in Vienna; the price of the apparatus is £7 10s. Mr. Bruck has also in stock a life-size and life-like *Model of the Lower Female Abdomen*, showing the external and internal generative organs, which can be taken to pieces, price £6.

## BIRTHS, MARRIAGES, AND DEATHS.

•• The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcement.

## BIRTHS.

ALTMANN.—On the 17th May, at Angaston, S.A., the wife of Dr. Charles A. Altmann, of Tanunda, of a daughter.  
 BENNETT.—On the 7th May, at Morphett, N.S. Wales, the wife of Dr. Bennett, of a son.  
 FURNIVAL.—May 7, at Auburn, near Sydney, the wife of Francis H. Furnival, M.R.C.S., of a daughter.  
 GRIFFITHS.—May 5, at Blayney, N. S. Wales, the wife of Dr. Ernest E. Griffiths, of a son.  
 GURDON.—On the 17th May, at Middle Brighton, Victoria, the wife of Dr. E. J. Gurdon, of a son.  
 HENRY.—On the 30th April, at Brunswick, near Melbourne, the wife of Louis Henry, M.D., of a son.  
 RYAN.—On the 2nd May, the wife of Dr. M. J. Ryan, Kyneton, Victoria, of a daughter.  
 RYAN.—On the 5th May, at Clifton-hill, Melbourne, the wife of Dr. T. B. Ryan, of a daughter.  
 SCOTT.—On April 15, at Cordillera, N. S. Wales, the wife of H. J. H. Scott, M.R.C.S. Eng., &c., of a daughter.

## MARRIAGES.

LEBMITTE-SCOTT.—On the 28th May, at St. Andrew's Church, Walkerville, near Adelaide, Charles Gower Leblitte, M.R.C.S., of Salisbury, S.A., to Augusta Katherine Winifred, youngest daughter of E. B. Scott, Yatala.  
 STEWART-M'FARLANE.—On the 15th May, at North Adelaide, by the Rev. H. M. Pollitt, Robert Stewart, M.D. Hindmarsh, S.A., to Alice, fourth daughter of Allan M'Farlane, Lake Alexandrina, S.A.  
 VAUGHAN-SHIERLAW.—On the 9th May, at the Scots Church, Melbourne, Alfred P. Vaughan, M.B. & Ch.B., Box Hill, Victoria, to Alice, daughter of George C. Shierlaw, Unley Park, South Australia.

## DEATHS.

FINLAY.—May 24, at Bathurst, N. S. Wales, Lena M. Alexander, wife of William Finlay, M.D.  
 RANKIN.—On the 14th May, at St. Kilda, Melbourne, Della Mary, fifth daughter of W. B. Rankin, F.R.C.S.E., aged 21 years.

## PUBLICATIONS RECEIVED.

*The Pathology, Clinical History, and Diagnosis of the affections of the Mediastinum* other than those of the Heart and Aorta. By H. A. Hare, B.Sc., M.D., Philadelphia: P. Blakiston, Son and Co., 1889.

*Transactions of the Royal Academy of Medicine in Ireland*. Vol. vi. Edited by Wm. Thomson M.A., F.R.C.S., General Secretary. Dublin: Fannin and Co., 1888.

*Transactions of the American Dermatological Association* at its twelfth Annual Meeting, held at Washington, D.C. Boston, 1888.

*Diphtheritic Paralysis*: With special Reference to the Prognosis. By H. Swift, B.A., M.D. Cantab. Adelaide: J. H. Sherring and Co., 1889.

*The Extrusion of Gall-stones by Digital Manipulation*. By Dr. George Harley. F.R.S., London: J. and A. Churchill, 1889.

*The Student's Text Book of the Practice of Medicine*, By Angel Money, M.D., Lond. London: H. K. Lewis, 1889.

*Ninth Annual Report of the State Board of Health of Illinois, U.S.A.*, 1889.

*Water Supplies of Illinois, and the Pollution of its Streams*. By John H. Rauch, M.D., Secretary, State Board of Health, 1889.

*Principles and Practice of Dentistry*. By Chapin A. Harris, M.D., D.D.S., 12th ed., illus. P. Blakiston, Son and Co., Philadelphia, 1889.

*Skin Diseases*. By A. Van Hafflingen, M.D., 2nd ed., illus: P. Blakiston, Son, and Co., Philadelphia, 1889.



## REPORTED MORTALITY FOR THE MONTH OF APRIL, 1889.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
N. S. WALES.														
Sydney .....	132,846	284	200	99	1	...	6	1	9	18	15	5	9	2
Suburbs .....	215,849	785	412	231	..	...	34	13	27	27	38	16	6	...
NEW ZEALAND.														
Auckland .....	35,858	74	30	16	...	...	...	...	...	6	...	1	1	...
Christchurch .....	16,455	32	16	5	...	...	1	...	...	2	1	3	1	...
Dunedin .....	23,546	41	23	12	...	...	...	...	...	5	2	...	1	...
Wellington .....	29,075	68	26	13	...	...	2	...	...	3	1	...	1	1
QUEENSLAND.														
Brisbane .....	51,689	210	112	51	}	...	4	3	11	16	8	4	5	...
Suburbs .....	21,960	111	34	25		...	...	...	...	...	...	...	...	...
SOUTH AUSTRALIA.....	312,813	...	...	...	...	...	...	...	...	...	...	...	...	...
Adelaide .....	43,750	...	...	...	...	...	...	...	...	...	...	...	...	...
TASMANIA.														
Hobart .....	34,693	100	49	13	...	...	1	...	4	1	4	4	1	...
Launceston .....	21,317	41	38	10	...	...	...	...	9	4	1	1	...	...
Country Districts.....	91,289	221	82	...	...	...	2	...	6	5	...	...	...	...
VICTORIA.														
Melbourne .....	75,400	165	128	} 402	2	1	44	12	113	40	81	50	28	10
Suburbs .....	362,385	1179	854											

## METEOROLOGICAL OBSERVATIONS FOR APRIL, 1889.

STATIONS.	THERMOMETER.					Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum	Sun.	Maximum	Mean	Minimum		Depth.	Days.		
							Inches			
Adelaide—Lat. 34° 55' 33" S. ; Long. 138° 36' E.....	...	...	...	...	...	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S. ; Long. 174° 49' 2" E.....	138	74	60.5	46	...	...	1.040	13	75	...
Brisbane—Lat. 27° 28' 3" S. ; Long. 153° 16' 15" E. ....	146	85.9	69.9	55.6	30.162	...	6.047	21	77	S.E.
Christchurch—Lat. 43° 32' 16" S. ; Long. 172° 38' 59" E.....	127	76.8	54.4	32.8	...	...	1.600	9	69	...
Dunedin—Lat. 45° 52' 11" S. ; Long. 170° 31' 11" E.....	119	71	51.9	37	...	...	1.838	8	74	...
Hobart—Lat. 42° 53' 32" S. ; Long. 147° 22' 20" E.....	...	77.7	57.3	36.8	30.043	...	2.78	14	78	...
Launceston—Lat. 41° 30' S. ; Long. 147° 14' E.....	...	75.5	58.9	33	30.106	...	2.24	10	83	...
Melbourne—Lat. 37° 49' 54" S. ; Long. 144° 58' 42" E. ....	...	87.9	60.5	37.2	30.042	...	3.60	7	...	...
Sydney—Lat. 33° 51' 41" S. ; Long. 151° 11' 49" E. ....	...	77	65.4	53.6	30.177	...	3.58	13	73	N.E.
Wellington—Lat. 41° 16' 25" S. ; Long. 174° 47' 25" E.....	123	70	56.2	40	...	...	1.315	7	75	...

[4253]

Office of Board of Health, Sydney, 6th June, 1889.

45 VICTORIÆ No. 25.

**"Infectious Disease Supervision Act."**

THE attention of the Medical Profession and the public generally is hereby drawn to the 2nd section of the above Act.

By order of the Board,

EDMUND SAGER, Secretary.

**Case of Small-pox to be reported immediately to the authorities under penalty of not less than ten nor more than fifty pounds.**

2. On the appearance of any case of small-pox or eruptive fever which may reasonably be supposed to be small-pox in any house or premises in New South Wales the householder or occupier of the said house or premises and also the medical practitioner attending the case shall immediately report in writing such case to the proper authorities in manner following that is to say if the case occur within the City of Sydney then the report of the case shall be delivered to the officer in charge at the nearest police station or lock-up or to the officer in charge at the Central Police Station or to the Health Officer of the Port of Sydney or to any member of the Government Medical Staff or the Secretary of the Board of Health and if the case occur beyond the City of Sydney then the report shall be delivered to the nearest Magistrate Officer of Police Clerk of Petty Sessions or to the Government Medical Officer of the district within which the case has occurred. If any person required by this section to report any such case shall fail to make such immediate report as hereinbefore required every such person shall be liable to a penalty of not less than ten nor more than fifty pounds which shall be recoverable in a summary way before a Police or Stipendiary Magistrate upon information laid by the Board of Health or by any officer appointed by such Board for that purpose.

[4252]

Office of Board of Health, Sydney, 6th June, 1889.

50 VICTORIÆ No. 17.

**"Dairies Supervision Act."**

THE attention of the Medical Profession and the public generally is hereby drawn to the 7th, 11th, and 12th sections of the above Act, and the Proclamation of His Excellency the Governor and the Executive Council, dated 24th November, 1886.

By order of the Board,

EDMUND SAGER, Secretary.

**Infectious diseases in dairy premises, &c., to be reported immediately.**

7. On the appearance of any case of infectious disease in any dairy-premises or milk-store within a district the householder or occupier or if there be no such householder or occupier the owner of such premises or store and also the medical practitioner attending the case shall immediately report in writing such case to the proper authorities in manner following that is to say if the case occur within the City of Sydney then the reports of the case shall be delivered to the officer in charge at the nearest of any police station within such district or to the Secretary of the Board of Health and if the case occur beyond the City of Sydney then the reports shall be delivered to the nearest Officer of Police Clerk of Petty Sessions or to the Government Medical Officer of the district within which the case has occurred.

**Penalties, &c.**

11. Every person who shall wilfully disobey or act in violation of any of the provisions contained in either of the last six preceding sections or shall resist or wilfully obstruct any person in the lawful exercise of any of the powers conferred under section four of this Act or shall without lawful excuse neglect or disobey any requirement made under the provisions of section four hereof or shall neglect or refuse to obey any order or direction of the Board of Health or any local authority made under the said section within the time limited in that behalf by such order or direction such person shall for every such offence be liable to a penalty not exceeding twenty pounds.

**Governor to declare what are infectious diseases.**

12. The Governor on the recommendation of the Board of Health shall as soon as practicable after the passing of this Act declare what are infectious diseases for the purposes of this Act and may thereafter from time to time add to alter or amend such declaration as may seem necessary or advisable. And the Board of Health shall forthwith furnish a copy of each such declaration and of each such addition alteration or amendment to every local authority.

NEW SOUTH WALES, } Proclamation by His Excellency The Right Honourable CHARLES ROBERT, BARON  
to wit. } CARRINGTON, a Member of Her Majesty's Most Honourable Privy Council, Knight  
(L.S.) } Grand Cross of the Most Distinguished Order of Saint Michael and Saint George,  
CARRINGTON, } Governor and Commander-in-Chief of the Colony of New South Wales and its  
Governor. } Dependencies.

WHEREAS the Board of Health has recommended that the diseases hereinafter mentioned be declared infectious diseases for the purposes of the "Dairies Supervision Act:" Now, therefore, I, CHARLES ROBERT, BARON CARRINGTON, the Governor of the Colony of New South Wales, in pursuance of the provisions of the above-cited Act, and with the advice of the Executive Council, do by this my Proclamation, declare the diseases named hereunder to be infectious diseases, viz. :-

**A.—In human beings.**

Cholera, Enteric Fever, Small Pox, Scarlet  
Fever, Diphtheria, Measles, Syphilis.

**B.—In Animals.**

Aphthæ, Cancer, Pleuro Pneumonia, Splenic  
Fever, Tuberculosis, Udder—inflamma-  
tions, eruptions, or warts of

Given under my Hand and Seal, at Government House, Sydney, this twenty-fourth day of November, in the year of our Lord one thousand eight hundred and eighty-six, and in the fiftieth year of Her Majesty's Reign.

By His Excellency's Command,

GEORGE R. DIBBS.

GOD SAVE THE QUEEN.

# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### THE ETIOLOGY OF TYPHOID FEVER.

PARTLY READ AT A MEETING OF THE INTER-COLONIAL MEDICAL CONGRESS ON 11TH JANUARY, 1889.

BY J. G. CARSTAIRS, M.D. EDIN.,  
OF GEELONG, VICTORIA.

THERE is perhaps no disease on which so much has been written, and ably written, during the last half-century, as typhoid fever and yet no other in which the progress of knowledge has been so much obstructed by the seductive but misleading practice of *theorizing*. Facts have been carefully recorded, but their value has been lost by the persistent attempts to make them fit some pre-conceived theory; the same facts being adduced in support of opposite theories, and this in regard to every point connected with the etiology, in none more so than the Autumnal prevalence of the disease.

This periodic annual prevalence all the world over, which places such a broad line of demarcation between typhoid and the other fevers so characteristic as to have obtained for it in America the synonym "Autumnal or Fall Fever," surely indicates something more in its nature than is accounted for by the theory of the level of the ground water, or that heat and stagnation promote decomposition, and inferentially, typhoid. The main object of this paper is to show that the Autumnal prevalence is in obedience to natural law, is the true key to the position, the standpoint from which the etiology should be studied. Before doing so, however, it is necessary, to avoid misunderstanding, to state certain articles of belief held by the profession generally.

It is admitted on all hands that typhoid fever is the result of the entrance into the body of a specific contagion always derived directly or indirectly from previous cases of the disease, which multiplies therein, permeates all the tissues, and is thrown off, chiefly say some, entirely say others, in the intestinal discharges. The processes set up by it in the living body are always true to type. It lives for an indefinite period on or in the soil, in drains, cesspits, dunghoops, wells, &c. It has a period of activity and a period of repose. These are common grounds, irrespective of theory.

It has been observed that these properties of the contagion bear a striking analogy to plant life. Like other seeds, that of typhoid owes its life to antecedent life, like them it lives in its surroundings, lies dormant for a time, and in

obedience to the law of its life, when the season comes round, it grows, multiplies, and brings forth fruit, as is evident from the regularity with which typhoid returns annually. Yet this germination and multiplication of the contagion outside the human body is still an undetermined question with many. To illustrate it the following table is constructed from the report of the Central Board of Health on typhoid, published in 1887, and the monthly records of the Government Astronomer.

TABLE SHOWING THE TYPHOID SEASON IN MELBOURNE, THE MEAN MONTHLY MORTALITY, AND THE MEAN TEMPERATURE OF AIR AND SOIL, AND RAINFALL.

MONTH.	Deaths from Typhoid.	Mean temperature of the Air.	Mean temperature of Surface Soil.	Mean Rainfall in Inches.
	Average for 9 years.	Average for 29 years.	Average for 28 years.	Average for 29 years.
November ...	5.8	60.2°	69.2°	2.51
December ...	12.6	68.4°	74.4°	2.40
January .....	17.4	66.2°	78.4°	1.78
February ...	25.7	65.6°	75.9°	1.96
March.....	34.2	63.6°	70.2°	2.16
April .....	32.5	58.7°	61.4°	2.18
May .....	31.5	53.2°	53.4°	2.08
June .....	19.1	49.5°	49°	1.94
July .....	13.8	47.5°	47.3°	1.69
August .....	10.4	50.4°	50.5°	1.89
September ...	7.1	53.3°	55.6°	2.29
October .....	7.7	56.7°	62.1°	2.85

From the first column in this table it will be observed that the average monthly mortality (and hence, prevalence) of typhoid in Melbourne is at a minimum in November, thence it increases more or less rapidly, and attains its maximum in March, the decline commences slowly in April and May, but in June there is a sudden fall which increases monthly till the minimum is again reached.

From the second and third columns in the table we learn that in June and July, our coldest months, the mean temperature of the surface soil has fallen below that of the air; in August they are equal, and vegetation commences; in September, that of the soil is 2.3° higher, and increases monthly till January, when it is about 18° higher. It then begins to fall gradually till in May they are again equal. For accuracy and comparison the mean temperature for the 24 hours is taken, but it may be as well to state that the maximum in the shade reaches roundly 85° in November, 105° in January, receding gradually to 85° in April.

As the mortality in one month must arise chiefly from persons who contracted the disease

in the previous month, and as the rise in the mortality and, therefore, of the prevalence of typhoid commences in December, most of the cases received their contagion in November. *Something*, therefore, has occurred in the latter month to account for the increase amounting to 120 per cent. in the former. What is it?

Seven and twenty years ago Murchison wrote: "It would seem that the cause of the disease is only exaggerated or called into action by the *protracted* heat of summer, &c." It is now the accepted belief that the *cause* is a living contagium. What constitutes *activity* in this living thing when inside the body? Is it not its multiplication and reproduction? And what else can constitute its activity outside the body? What has occurred in November then is that this contagium has begun to grow and multiply, and the commencing prevalence of typhoid in December is at once the result and proof of this multiplication; and this is coincident with a mean temperature of the air of 60·2° and of the surface soil of 69·2° for November. That this is no mere coincidence is shown by its annual return, and further by the fact that when the temperature of air and soil in November is above the average or below it, the December prevalence is greater or less—in other words, the season for typhoid is earlier or later. For example (see Central Board's Report), the typhoid season for 1886-7 was "unusually early." It was, also, according to the Government Astronomer, "early for vegetation, birds, &c.," and the mean temperature of the air was 1·7°, and of the surface soil 8·8° higher than the average for 28 years for November.

But the increased prevalence in December is only the beginning. With the increasing temperature the rate of the multiplication of the contagium increases, and, as a consequence, the numbers affected and the mortality, till the maximum is reached in March to April; after that, the temperature having fallen below that of November, *germination in the open air or elsewhere is arrested*. Hence, in June there is a sudden fall in the death-rate, and, as in December, the rise of that rate was shown to be the result and proof of the multiplication of the contagium, so in June is the fall the result and proof of its arrest.

The specific living contagium of typhoid, therefore, germinates and grows outside the body on the soil or where it finds itself; and, in doing so, obeys the same law that governs other living things, the condition of its growth being a certain range of temperature such as we have here from November to April, the period of its greatest activity being when the temperature out-

side is equal to that of the human body. This last observation will be referred to again.

But it may be asked, what of those cases of typhoid that occur between June and November, in winter in fact? If germination of the contagium is arrested, why is the disease not arrested also? The reply is simple; the disease is *arrested* to a great extent as will be seen from the table, the mortality during the last half of the year being only one-fourth of that of the first half, and contagion direct and indirect, could account for that small number. But it must be remembered that though they cannot grow and increase at the outside temperature, the germs are in winter, as in summer, in their habitats, and the turning over of a dunghheap, the emptying of a cesspool, the opening up of a drain, in short the disturbance of the media in which they lie will set them at liberty to find their way into the human body.

The complement to the quotation from Murchison about the effect of heat in promoting the activity of the *cause* of typhoid is, "and that it requires the *protracted* cold of winter and spring to impair its activity or to destroy it." Murchison was a close observer and faithful recorder of fact, but theory blinded him to the true value of his observations. Time has but emphasized the correctness of his observations on the effects of temperature on the *cause*, the specific contagium of typhoid. Take his Table xxxi of the monthly admissions to the London Fever Hospital for 14½ years, from 1848 to 1862—The minimum is in April and May, the rise of the prevalence commences in June and increases monthly, until the maximum is attained in September-October. The wane begins in November and the abrupt drop occurs in December of one-third. The number of cases in the first half of the year being rather more than one-fourth of those occurring in the second half.

Thus in England, as in Australia, the contagium germinates outside the body in its season, continues active while that lasts, and when it has ended germination is arrested, and with it the prevalence of the disease.

Water containing the germs of the disease must of necessity when imbibed produce it at any time of the year, but it is evident that the occurrence of epidemics of typhoid from that source in winter forms no argument against the observed facts of the Natural History of the Contagium, which will now be further illustrated in that of the *Bacillus of Typhoid*.

The *Bacillus of Typhoid* is found in the various organs and textures of the body, in the blood and in the excretions; it is also found in the soil, the river, the well, &c.; inside the body and outside

of it, it grows and multiplies; it can be cultivated and the cultivations are *always true to type*. Like other pathogenic bacilli it multiplies within certain limits of temperature, and the rate at which it does so is prolonged as the temperature is lowered until the limit is reached at which spore formation is arrested and it lies dormant. Gaffky who specially investigated the effects of temperature in the sporing of the bacillus says:—"The formation and growth of spores take place undoubtedly at 107.3° F., if not quite so abundantly as at the temperature of the body. The temperature most suitable for spore formation seems to be from 86° to 104° F. At 77° F., it occurs somewhat later but still indubitably. The lowest limit seems to be 68° F., at least at this temperature after eight days growth I have only observed a very few and only moderately developed spores in the bacilli. After two more days the process was not much further advanced."

Chantemesse places the limit at 67° F., so it may be accepted that below that temperature sporing ceases, that at 68° it is incomplete at the end of ten days, but proceeds more rapidly as the temperature rises until between 86° and 104° it is perfected in the shortest time, which, according to Gaffky, is three-and-a-half days.

Another point to be noted is, that the bacilli grow and thrive in water that is clear and bright, and *remarkably free* from organic matter. Again, in all his cultivation experiments, Gaffky "never found the bacilli become causes of putrefaction, although sown on substances very liable to putrify." These observations, positive and negative show that fermentation and decomposition are not necessary for the sporing of the bacilli, and the natural inference is that they are never necessary, and have no part in the process.

Although experiments on the lower animals have yielded only negative results, probably because they possess an immunity from the disease, yet what may be called natural experiments on the human subject, go to prove that the bacillus produces typhoid in man. Several instances are on record, eminently one, notes of which were read by Breuardel at a meeting of the Académie des Sciences, at Paris, it will be found in the *B.M.J.* for January 29, 1887, page 224. In September, 1886, twenty out of twenty-four visitors to Pierrefonds contracted Typhoid from drinking well-water; a careful investigation was made by Chantemesse and Vidal. They found the bacilli in the water and in the blood of the patients, and cultivations of this blood gave rise to colonies of the same bacillus that was found in the water. A similar instance occurred at Compeigne, and is related in the number for January 22, 1887, page 167. It is to be noted in this connection that

the duration of the initial stage of the fever, the half-weekly periods observed in its progress, and the average duration of the rose spots correspond with the time occupied in spore formation at the temperature of the body, viz., three to four days.

On comparing the characteristics of the bacillus with those of the contagium previously stated it will be observed that they are identical—specific living multiplying, growing inside of the body and outside of it. Germination of the contagium begins at the same temperature as that at which spore formation begins in the bacillus, and the temperature when sporing in the latter is most rapidly perfected is that at which the former is most active. What Gaffky modestly claimed a few years ago as a strong probability, is now maintained by Koch and others as a certainty, viz., that the bacillus is the specific cause of typhoid fever; but it has been shown that by common consent the contagium is held to be the specific cause, therefore, both being equal to the cause, are, according to the mathematical axiom, equal to one another. The "Germ" of Budd, the "Specific Contagium" of Cayley, Collie, Payne, &c., the "Bacillus" of Eberth, Gaffky, Koch, &c., are one and the same, and this living thing grows and multiplies like other living things, according to Natural law, manifesting its existence by the advent of typhoid in its season with unerring regularity, and keeping time with other forms of plant-life should the season prove early or late.

Seasonal Prevalence of Typhoid.—It is generally accepted that typhoid is unusually prevalent when the season is hot and dry, and unusually scarce when it is cool and moist, and the explanation given is, on the one hand, that "heat and stagnation promote decomposition," and therefore typhoid; and, on the other, that the rain washes the impurities from the air, flushes the drains, hence its scarcity. Another view is that the disease is most prevalent in a hot and moist season, "heat and moisture promoting putrefaction." These views show how strong the belief is in the Pythogenic theory, notwithstanding that the doctrine of the generation *de novo* has been abandoned, and that of the specific origin admitted. Submitted to the test of statistics it is found that these statements are correct *only* so far as the temperature is concerned. If the season is *hot*, no matter whether it be moist or dry, typhoid prevails; and if *cool* it is scarce, irrespective of the rainfall.

The average mortality from typhoid in Victoria for the 22 years from 1866 to 1887 is 434. The average rainfall at Melbourne for 28 years from 1st November to 28th February (the breeding season for typhoid) is 8.65 inches; the rainfall for the same period in the six years of the greatest

mortality was as under :—5·34, 9·81, 6·86, 8·93, 11·15, 9·99 inches. All of these years were excessively *hot*. In 1888, with the highest mortality on record (661), the rainfall (8·93 inches) was only 28 points above the average ; in 1866 and 1878 it was very much below ; in the three remaining years it was very much above the average. In the four years of the lowest mortality, which were cool, the rainfall for the above period was 7·31, 9·95, 14·71, and 7·31 inches, or below the average in two, and above it in two. The variations in the rainfall were great, but typhoid was *prevalent* or *not* according as the seasons were *hot* or *cool*.

The evidence from statistics and from the experiments of the bacteriologist here throw a mutual light on one another, and correct the results of observation ; the high temperature invariably obtaining in seasons when typhoid is prevalent corresponding with that at which sporing of the bacilli is perfected in the shortest time, and therefore, when the spores are most active and most numerous, and the lower temperature in the seasons of non-prevalence with the protracted sporing at lower temperatures when they are less perfectly developed, less active, less numerous. \*

But moisture is as necessary to the sporing of the bacillus, the germination of the contagium, as it is to that of other seeds. It is a correct observation that, during the season, a fresh outbreak of typhoid follows a fortnight after rain—the amount need not be great, a good shower suffices, and in our driest seasons these occur.

Contagion.—All agree that the contagium leaves the body in the dejections ; some maintain that the recent stools are “innocuous and devoid of the power of contagion,” but that after having undergone decomposition “they certainly contain the typhoid poison.” Surely this is a contradiction in terms. The question is not one of *acquired virulence* but of *inherent life*. If the contagion on leaving the body has lost the power of contagion, that is of growing and multiplying, it is *dead*. If decomposed typhoid stools “certainly contain the poison” it is because it existed in the fresh stools, for there is no spontaneous generation. No, the specific cause that has wrought such havoc in the human body leaves it a living self-propagating thing, and it has previously been shown that decomposition is neither necessary to nor an accompaniment of the process of spore formation in the bacilli—the germs. Its mode of

entrance into the body is said to be almost exclusively by the alimentary canal in food or drink, that it enters by the air passages is regarded as a probability only. That any article of food or drink containing the typhoid germs *does*, nay *must* of necessity produce the disease, goes without saying. That epidemics have been clearly traced to contaminated water, food, milk, &c., is undeniable ; but it is to be observed that outbreaks arising in this way are *localised*, the victims being attacked *simultaneously*, and they occur at *any time* of the year. But who will affirm that the regular annual return of typhoid, here or elsewhere, is due to an equally regular pollution of food and drink, and that this pollution is early or late, according as the season is.

Therefore, as by far the greater number of the cases occur during the typhoid season their contagium could not have entered the body in food or drink by the alimentary canal, and must have entered by the air passages, the direct and natural way in contra-distinction to the indirect and accidental.

Direct Contagion.—A living contagium that flows in the blood finds itself in the capillaries of the skin and of all the organs of the body, and must be eliminated in all the emanations. Admitting the chief outlet to be by the bowels, yet the invariable anatomical sign is not the only abdominal lesion. Are the germs, the bacilli found in the mesenteric glands, the liver, spleen and kidneys, eliminated by the bowel ? It would appear not, as they have been found in the urine. Again, the condition of the air passages has been almost overlooked, yet if the throat is examined it will be found to be the seat of diseased action far more frequently than is generally believed—at times intensely inflamed, the follicles enlarged and covered with a pseudo membrane so as to have been mistaken for diphtheria. These conditions are the result of the same specific cause that has produced the intestinal lesion, and their contagia must be thrown off in the breath and sputum, and those also from the larynx, bronchial tubes and stomach. And the skin ? Throwing off 80 per cent. of the body heat, and, as the smell from its surface indicates, the products of tissue change, why not the contagium too ? If, then, elimination takes place from the air passages and skin, their emanation are directly contagious, as are those from the bowel. Observation leads to the same conclusion. The contagion distance, however, is short. The bed-fellow for a few hours of a patient, who has come home from a distance, ill of typhoid, alone developing the disease, the other members, perhaps, of a large family escaping, here the negative again supports the positive fact. The contagion appears to

\* Note (p. 22) An interesting question is suggested here. Does the length of the incubation period depend upon the introduction of bacilli, sporing at different temperatures ? Patients, at the beginning of the typhoid season, give a history of illness lasting over several weeks before finally taking to bed. Is this because of the inception of a slowly sporing bacillus which requires to pass through several generations before attaining its full power ?

cling to the body; it certainly clings to the clothing and, moreover, to a locality. It has been frequently noticed that in the larger towns the bulk of typhoid patients sent to hospital came from a comparatively limited area. Admitting that a majority of these were infected from the intestinal discharges, its share in the propagation of the disease must not be denied to *direct personal contact*.

In towns during the period of prevalence it is not always easy, is often impossible, to trace the source of contagion. So it is with small-pox, but like small-pox, typhoid is always derived from previous cases. Nothing more clearly shows the spread by direct contagion than the progress of typhoid in thinly-peopled districts where no fever existed for years prior to the arrival of a patient suffering from the disease. First, the members of the household are affected, then their friends who have visited the house or assisted in nursing the patients, from person to person and family to family by personal contact and family intercourse. The journals abound with descriptions of such outbreaks, all the more valuable often as evidence on this point because not written with a view to sustain it. Equally clear with the spread by direct contagion is the arrest of typhoid by *isolation* of the patient and *burning* of the excreta.

## ON TWO CASES OF ACUTE YELLOW ATROPHY OF THE LIVER (?) IN WHICH RECOVERY TOOK PLACE.

READ BEFORE THE N. S. WALES BRANCH, B.M.A.

By THE HON. J. M. CREED, M.L.C., L.R.C.P.,  
M.R.C.S.E., AND R. SCOT-SKIRVING, M.B.,  
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SYDNEY UNIVERSITY.

ON May 30, 1888, Mrs. D., æt. 24, called at my house to consult me professionally. She was about midway between the seventh and eighth month of her third pregnancy. She was markedly jaundiced, her urine being loaded with bile and the fæces slate-coloured. She had been nauseated and out of sorts for some days, but had not been laid up, nor had she suffered any pain. The reason of the jaundice was not easily decided, but it did not appear to be caused by any obstruction of the biliary ducts. I prescribed Euonymin and Leptandrin, of each a grain, every four hours, with sufficient Carlsbad salts in repeated doses to produce free action of the bowels at least three times in the twenty-four hours. On June 1, I

visited her at her house, finding her in bed with more marked jaundice, and though answering questions sensibly, in an apparently dazed condition. There was no tenderness over the hepatic region, but the hepatic dulness was less than normal in extent. She had an attack of rigors on June 2. The Euonymin, Leptandrin and saline aperient continued with the addition of Quinina Sulph. gr. ij every three hours. I saw her daily, the bile poisoning increasing in intensity, she being now in a more or less comatose condition. Her pregnancy being decidedly adverse to her chances of recovery, and the movements of the fœtus having become imperceptible on examination, the question of inducing premature labour arose, and on June 5 Dr. Scot-Skirving kindly met me in consultation. After careful examination by both of us, hepatic dulness being found to be greatly lessened in area, the diagnosis arrived at was that she was suffering from acute yellow atrophy. This decision was confirmed by an examination of the urine made by Dr. Scot-Skirving, who detected leucine and tyrosin in large quantities. It was decided to continue the treatment at first adopted, the induction of premature labour to be left in abeyance. This, however, was settled on June 6 by labour coming on spontaneously, delivery was rapid, the child being alive, though very feeble, only surviving its birth a few hours. It was jaundiced, and the liquor amnii was very yellow. Special liability to hæmorrhage being probable, she was carefully watched, and I compressed the uterus for some time with my hand, giving two 3i doses of Liq. Secale. There was some slight excess of bleeding, but all went well in the end. I saw her three times on June 6, and again on June 7. On the 8th Dr. Scot-Skirving again met me on the case, and it was decided that her spontaneous delivery had heightened her chances of recovery though there was but little apparent change in her state as depending on bile poisoning. She continued in an almost comatose condition, though swallowing, when aroused, whatever was put to her mouth. On the 9th she was so insensible as to have ceased to pass her urine, though the bladder was found to be greatly distended. I passed a catheter and drew off upwards of three pints. This was, however, only necessary on this one occasion. Dr. Scot-Skirving met me on the 10th for the third and last time, and it was decided to make no change in the treatment until the jaundice had disappeared. I saw her daily to June 27. Bile gradually reappeared in the fæces and lessened proportionately in the urine; the conjunctiva becoming less stained. She regained complete consciousness by degrees, and made steady progress to complete recovery. There was no rise in tempera-

ture during the illness. I saw her at gradually increasing intervals to July 23, when, she had perfectly recovered, the area of hepatic dullness having regained its normal size. She remained somewhat darker in complexion having always been a brunette, but has continued in perfect health until quite lately, when having again become pregnant, she has had some gastric irritability and dyspepsia, apparently depending on her state. This has yielded very quickly to 3ss doses of Acid Hydrobromic, with  $\text{m} \ 5$  of Tr. Nucis Vomice, given every three hours. She tells me that she has no recollection of her illness after my first visit or of her delivery, and that she was much astonished on her convalescence to discover her reduced size, and to hear that she had been confined.

The second case we wish to bring forward is that of Mrs. W——, aged about 28, also pregnant at  $8\frac{1}{2}$  months, and resident in the same neighbourhood as the last patient, and ill almost at the same time. Her history is somewhat similar.

A condition of moderate jaundice lasting about a week, then urgent symptoms supervening. I saw her on the 16th July, 1888. She was then evidently pretty urgently ill; somewhat jaundiced, but not deeply so; temp.  $102.5$ ; pulse quick and full,  $110$ ; tongue furred and tending to dryness; abdomen distended, tender over hepatic region and in left hypochondrium and liver dullness, only to be made out on deep pressure-percussion.

During the night labour set in, and she was easily delivered of a living jaundiced infant which has survived. Nothing more need I say of it, except that slight hæmorrhage recurred at intervals during the separation of the cord. On the following day, and for several subsequent days, the patient's condition gave me increasing anxiety. The pulse range was from  $90$  to  $130$ ; the temperature from  $100$  to  $103$ , but fell when her general symptoms were at their worst—the general symptoms increased in severity. Petechial spots appeared on the limbs and trunk. Vomiting of a very troublesome character occurred, at first green, afterwards coffee-ground coloured—occasionally actually bloody. The stools also gave evidence of altered blood. The patient was delirious at night, and presented during her waking moments much mental hebetude. An internal strabismus developed.

The liver dullness, so far as meteorismus permitted it to be mapped out, was, in the course of a week, reduced to three fingers breadth. The hepatic region was markedly tender. The quantity of urine was not estimated, but it was diminished, I believe.

It was acid and contained no albumen, and no tube casts, and apparently no leucin or tyrosin. The urea was not estimated. Bile pigment and bile acids were present. Dr. Creed saw the case with me, and we adopted a precisely similar treatment to that already described in his patient. After 10 days of doubt as to the issue of the case improvement set in. Her cerebral symptoms disappeared and the jaundice abated. She then made a complete recovery.

With regard to the urine, I lay no stress on the report of its condition, as I confess from lack of time I examined it but inefficiently. I think it highly probable that leucin and tyrosin were present, but other matters engaged my attention, and I had no time to evaporate the urine to a concentrated solution, as was done in the other case.

Remarks.—Although we cannot doubt—from a pretty extensive survey of the literature of the subject—that recovery occurs oftener in acute yellow atrophy than the bulk of the profession are inclined to suppose, still, the fact of recovery in these cases, and the consequent happy absence of an autopsy, make us a little diffident in the diagnosis.

In both they occurred in females and during pregnancy—suggestive facts. It is of interest that they occurred in the near neighbourhood of each other, a point which bears on the endemic character of the disease. In the first case we had all those factors present which, as Murchison says, justify us in making the diagnosis of acute atrophy, viz., icterus, cerebral symptoms and the urinary changes. In the second case we had icterus, cerebral symptoms, blood changes, and possibly the urinary abnormality as well. What must we conclude? We are well aware that icterus is not uncommon during the later months of gestation apart from acute yellow atrophy, but clearly neither of these cases were of this simple nature. Again, medical literature of the past generation and of a period still further back, teems with cases called "total jaundice," icterus typhoides or "malignant jaundice." Did these cases belong to that category? It is a significant fact that these cases, under that nomenclature, have steadily diminished since Rokitsky published the first good scientific account of acute yellow atrophy. No doubt cases do occur, though rarely, in which phenomena such as we have here recorded do occur, and yet, without gross hepatic pathological change. May such cases not represent a form of hepatic disease in which the function of the liver is so far interfered with as to produce the symptoms of acute yellow atrophy, death or recovery to health taking place before obvious morbid change has occurred? A survey of such reported cases would favour this hypothesis.



## CLINICAL OBSERVATIONS ON HYDATID FLUID.

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WHEN one resorts to the exploratory needle to clear up his doubts as to the nature of some obscure form of swelling, the mystery is not always cleared up when the operator gets for his trouble a return of clear limpid fluid, with a neutral reaction, a specific gravity ranging between 1004 and 1015, excess of chlorides, and a freedom from albumen.

The presence of hooklets, or scolices, or brood-capsules under the the microscope constitute in themselves absolute proof, but in many cases of genuine hydatids microscopic research gives no additional help. This is specially true of the large number of cases that receive the name of *acephalocysts*.

In the case of a patient where we had to deal with increased liver dulness, and some diffuse patches of dulness over the abdomen generally, and fine fluid in the peritoneal cavity, the exploratory needle yielded fluid which was almost identical with that taken from a fresh hydatid cyst both in its physical and chemical characters. From the *post-mortem* examination that was made subsequently on this patient, the liver was found enlarged from waxy disease, and the intestines matted together from old-standing peritonitis, and the ascetic fluid had the characters mentioned from the hydramic condition of the patient.

I have obtained similar fluid from an abdominal tumour in a young girl, which eventually proved to be a parovarian cyst.

Hydatid fluid is also occasionally met with in different colours, without apparently having gone on to suppuration; thus I have found it of a dark green, of a coal-tar appearance, and of a blood-stained colour, and containing crystals of hæmatoidin.

A single exploratory puncture may alter the whole character of the remaining fluid by its becoming co-mingled with transuded serum, and hydatid fluid thus mixed with serum speedily suppurates; but as a rule it remains of a thin liquid character, a fact of some importance in considering the treatment of this affection.

Some authorities refer to the presence of minute quantities of grape sugar, and the abundance of cholesterine crystals, leucin and tyrosin, when the cysts are connected with the

liver, and to the presence of uric acid, triple phosphates and other solid constituents of the urine, when they are connected with the kidney. Their presence, however, is far from being constant, and of but slight clinical value when found.

Fluid extravasated into the peritoneal cavity, as occasionally happens after tapping or exploratory puncture, may give rise to serious consequences both immediate or remote.

Acute symptoms may follow immediately after tapping or exploratory puncture, simulating an active attack of peritonitis—severe abdominal pain, rapid pulse, vomiting, and often alarming collapse. It is in such cases that the Urticaria-like rash makes its appearance, lasting usually from two to three days, taking the form of the characteristic wheals, with aggravated cutis anserina and itchiness. There may also be a certain amount of capillary injection, giving a mottled appearance to the surface of the body. The rash is usually most profuse over the abdomen and legs, and may be absent from the chest and face. A case is recorded where the rash was distributed only on the face, neck, and arms.

In one case that I had occasion to tap six different times for an hydatid of the liver, which kept persistently filling and refilling, a diffuse redness on the face and neck and arms was quite noticeable on each occasion.

It has been attempted to explain the appearance of this rash from the action of some form of poison in the fluid itself. A similar rash has been known, however, to follow the simple act of tapping in cases of pleurisy with effusion. McCall Anderson mentions a case where it appeared in a patient every time a sound was introduced into her uterus, and in another where the mere mention of the word "nettlerash" brought about its appearance.

In volume xi of the "Clinical Transactions," Bryant records a case where a fatal issue followed tapping a hydatid cyst, and where he believed death to have been brought about by the passage of fluid into the blood stream, finding access there from an aperture in a venous trunk which the trocar had made.

Professor Roy, of Cambridge, conducted a series of experiments with a view of ascertaining the nature of the cause of the alarming symptoms which, from time to time, are observed to follow the passage of this fluid into the blood stream and abdominal cavity.

He first injected a quantity of hydatid fluid into the jugular vein of a guineapig, which caused increased frequency to the respiration and made the heart's beat irregular.

He next opened the peritoneal cavity of two more and injected fluid, but only got negative results as long as they were watched.

He then fastened a canula to the vein and carotid of a large dog, connected with a kymograph and injected a quantity of fluid slowly into the vein. The blood pressure fell. Respiration became slower and the pulse quickened. Further doses at five minute intervals caused the blood pressure to sink gradually, also the pulse and respiration. As the animal seemed dying, small doses of atropine were injected, when the blood pressure rose and kept up, notwithstanding that a further quantity of fluid was injected.

He summarized his experiments as follows :— "In hydatid fluid there is a substance which has a powerful effect on both the heart and respiratory mechanism. From the first two doses little effect was produced, but a larger dose resulted in a slowing of the heart from 70 to 80 per minute, which was very striking. The acceleration of the respiration by the first dose and its great slowing by a further dose, is also very remarkable. The great fall in the blood pressure after the third dose, shows that the fluid from hydatid cysts contains some substance which can affect the blood pressure in the systemic arteries to a very serious extent." He also pointed out that the marked changes which affected the heart's heat, the respiration and the blood pressure after the injection of atropine, was a point of great interest as well as of some practical importance.

I have injected hydatid fluid into the abdominal cavity of several dogs with negative results, and in one case, when I opened the abdominal cavity and put in half-a-pint of fresh fluid, the animal never seemed to be a bit the worse. It was killed three weeks after, and the peritoneum showed no signs whatever of irritation.

The cases where a fatal issue has resulted from a simple puncture, have nearly always been confined to the abdominal cavity, except in those cases of pulmonary hydatids where the obvious cause of death was the flooding which followed the ruptured cyst after the puncture.

There is a fatal case recorded in the *Lancet* for August, 1875, where a fine trocar was passed into a cyst in the liver, and where the patient became sick and faint, and died within 20 minutes after.

In Bartholomew's Hospital reports, volume xvi, there is the record of a case where the patient died suddenly after the trocar had penetrated a small cyst in the right lobe of the liver.

In the International Encyclopædia of Surgery it is recorded that the symptoms which followed in a case of simple exploratory puncture of the liver, where there was no cyst, seemed almost

identical with those attributed to the absorption of hydatid fluid, and it has been suggested that the symptoms might be explained by a sudden inhibitory influence on the heart, exerted in a reflex manner through the sympathetic.

The effects of hydatid fluid passing directly into the blood stream requires further experimental proof before any general conclusions can be arrived at. I am quite convinced that, locally, it is in its fresh state non-irritating.

There are many cases where it can easily find an entrance into the circulation.

The veins in the surface of the ectocyst are occasionally observed to be dilated and varicose, so that they might easily be pierced by the passage of a trocar, and an entrance thus made for the fluid into the circulation.

I made a *post-mortem* examination on a powerfully made man who was found in one of the public parks in *articulo mortis*. There was a hydatid cyst, about the size of a foetid head found on the under surface of the liver, and having an attachment to the vena cava at its sinus. It was filled with fluid blood, and there was a communication between it and the veins. All his other organs were healthy; there was no extravasated blood anywhere else, so that the cause of death must either have been shock from the sudden rupture, or else the effects of the fluid passing into the blood stream.

Of greater importance are the more remote effects of hydatid fluid extravasated into the peritoneal cavity. It has never been accepted that active scolices, finding their way from the parent cyst into the general surface of the peritoneum, as they must often do after the ordinary process of tapping, may themselves become developed into secondary cysts. They and the brood capsules develop into the daughter bladders when in the parent sac, so that one can easily conceive of their taking a similar mode of growth outside of it, and such a favourable medium as the peritoneal cavity. This view is strongly supported from cases that one now and then comes across. Their frequency in the most dependant part of the body, attached to the rectum, in the *cul-de-sacs* in front and behind the bladder and uterus, besides on the fundus of each of these organs, on the surface of the great omentum, where they would naturally lie, assuming the patient to take the recumbent position after the operation of tapping.

At the *post-mortem* examination of three cases who died from suppurative exhaustion, the great omentum in two of them was studded with minute specks, which, on microscopic examination, showed the characteristic structure of the cyst wall with the ectocyst of fibrous tissue, and scattered throughout it were the old hooklets.

These small hydatids were also seen over the upper surface of the spleen and kidneys, the very places where the fluid would have gravitated to after leaving the liver cyst. In another case in the pouch of Douglas, over the fundus of the uterus and in the utero-vesical pouch, there were myriads of tubercle-like eminences which, under the microscope, showed the real hydatid structure. Each of these cases had been operated on, one by incision and two by aspiration, so that there was ample opportunity for the fluid to have become extravasated.

In another case of a boy who had an hydatid swelling in the liver from which only a small quantity of fluid could be obtained after repeated trials, and, the symptoms not being urgent, no further treatment was thought advisable. He was seen two years afterwards, when a nodulated condition of the omentum was distinctly felt. Mr. Pearce Gould referred to a case in the *Lancet*, January 29th, 1887, of a suppurating hydatid of the liver, which he operated on by abdominal incision. The omentum was found thickly studded with aborted cysts, and the patient had been tapped on two previous occasions.

One cannot attempt to explain all the cases of multiple hydatids in the abdomen on this theory, as it pre-supposes the escape of the scolices and brood capsules from the parent cyst, either into the blood stream or a serous cavity. Nor does the disparity in size prove anything, as Leuckart found marked differences in the size of cysts which developed from the same feeding.

Multiple hydatids must result from one of three ways:—

- (1) The result of numerous infections of ova.
- (2) A single infection of numerous ova.
- (3) From an ovum which in its turn has given rise to numerous progeny.

I am strongly inclined to the view that the last of these modes is more common than is generally supposed. This view is supported from strong evidence obtained at several *post-mortem* examinations. It is improbable that the essential elements, when liberated from their natural home—the parent cyst—do invariably undergo developmental changes in remote quarters, but if clinical evidence is in favour of their ability to do so, then it points to fixation of the cyst, before aspiration or incision, as the correct mode of treatment. It may be argued that simple aspiration in the great majority of cases works a cure. The patients, however, are generally lost sight of in subsequent years, and it is to be remembered that an abdominal cavity once infiltrated with numerous hydatids places the patient practically beyond the benefit of any treatment.

## CASE OF TETANUS.

READ BEFORE THE QUEENSLAND MEDICAL SOCIETY, BY THE PRESIDENT, BRIGADE SURGEON JOHN THOMSON, M.B. et Ch.M.

WEDNESDAY, 8th April, 1889.—Late in the evening, V. H., a lad of 14, was brought to my rooms suffering from tetanus. The muscles of expression were those chiefly affected; the risus was well marked; the eyebrows were highly arched and the forehead deeply furrowed; there was a certain rigidity about the jaws, but no stiffness of the neck. The gait was peculiar; patient walked like an old frail man, bent with pain, and he did complain of slight pain over the diaphragm. The symptoms had shown themselves early in the morning of Monday, the 1st April—two-and-a-half days before—and the friends attributed them to a shock he received a few days previously. While endeavouring to climb into a dray, his foot slipped from the step and he came to the ground and jarred one of his knees, I forget which. There was no cut or sore or any apparent injury anywhere.

The case was then one of so-called idiopathic tetanus, and from the onset, chronic. I ordered a calomel purge and a vapour bath—both acted well—and that chloral should be freely given. This order was but indifferently attended to, for the mother would not consent to have a nurse, and was afraid to push the medicine, and so the lad was never very fully under its influence.

He got gradually worse; the jaws became firmly clenched; every muscle seemed rigid; the patient could be moved like a board; still the pulse and the temperature were normal, and there were no complications.

Tuesday, the 9th of the month, and ninth day of the disease. There was retention of urine, and the catheter had to be used, and as the bowels had not acted for three days castor oil was administered, but without effect. A nurse was now obtained, and on the morning of Wednesday, the 10th, she gave a glycerine enema, which failed to act. About noon I ordered her to throw up a quart of warm water, and when I saw the patient again at 10 p.m., acting on her own responsibility, she had during the day injected nearly seven pints of water without producing any effect, and without apparently incommoding the patient. I then ordered that he should be enveloped in a hot, soapy blanket for a couple of hours—until now an ice-bag had been kept constantly applied to the spine.

Thursday, the 11th.—There was no improvement; the bowels were inert; the urine had to be

withdrawn; the jaws were firmly fixed, and all power of swallowing was lost; besides, the temperature was rapidly rising,  $108^{\circ}$ ; the pulse was 140 and the respirations 48, and the chloral was unnecessary, for an unconsciousness, quite unconnected with the drug, was now established. The patient was packed in hot, soapy blankets three or four times during the 24 hours, and the mother, after asking me, applied a large poultice of tobacco leaves to the abdomen.

Friday, the 12th.—The bowels have relaxed, and the contents are slowly and involuntarily oozing away, the stench is intolerable; the urinary retention has disappeared and the urine is voided unconsciously; the temperature is  $104^{\circ}$ ; the pulse nearly 200; the respirations, 60; the jaws are tight; deglutition impossible, odour from the mouth, loathsome: there is no apparent relaxation in the muscles of the extremities; death is imminent. But death did not take place.

Saturday, the 13th.—There was little or no change, and the packs were continued.

Sunday, the 14th.—Marked improvement took place; the temperature, pulse, and respirations all fell; the bowels ceased running and the patient regained consciousness.

For the next week, during which Dr. Tilston, who had helped me with the case, took charge owing to my absence from town, the tetanic spasms were often excessively severe and chloral had to be very freely administered, and the patient's strength was so exhausted that fears were still entertained for his safety. However he slowly progressed; the spasms gradually disappeared; on the 12th May he was out of bed, and on the 15th left Brisbane for home, weak but well, free from all spasm, except in his forehead, which would chiefly wrinkle, and complaining only of some pains in the muscles of his thighs.

The amount of chloral administered, and it had to be continued nearly to the last, was about  $22\frac{1}{2}$  ounces of Liebreich's syrup, a preparation I have used largely and have found very reliable,  $22\frac{1}{2}$  oz. is equal to  $3\frac{3}{4}$  oz. of chloral hydrate. I don't think the spinal ice-bag was of much service, but I have great faith in the hot packing and should adopt it in all cases of tetanus. Of course, I need hardly tell you that the mother believes her boy owes his life to the tobacco poultice.

Now this case presents some peculiarities. That it was idiopathic of course I admit, but don't you think the term is one expressive of our ignorance of the pathology of the disease? Idiopathic means "peculiar disease" or one not dependent on any other. Is it not possible that in this case there was another affection? and that it gave rise to the peculiar *materies morbi* which acts primarily on the circulation, and

secondarily on the spinal cord, for it is stated, "that the occurrence of idiopathic tetanus seems difficult of explanation upon any other supposition than that of an alteration in the blood itself."—MacDougall, *Lancet*, 19/7/84.

The temperature was remarkable. Macnamara in Quain says:—"If the mercury rises beyond  $101^{\circ}$  there is impending danger, and if it reaches  $108^{\circ}$ , the case is one to cause us the greatest anxiety." The temperature was  $101^{\circ}$  on the morning of the ninth day, and steadily rose to  $104^{\circ}$  on the twelfth, about which it remained on the thirteenth, and then fell to normal on the eighteenth.

It is also stated, "if they survive the twelfth day, the malady, as a rule, gradually subsides." It almost seemed as if the twelfth and thirteenth days, in this case, were critical.

One writer says:—"There may be constipation, but the sufferer will have perfect control of the bladder." It was not so here. Patient had retention for three days, from the ninth to the twelfth, and subsequently for days he suffered from incontinence.

Then most authorities state, and it has been my past experience, "that the mind usually remains clear;" but, in this instance, insensibility, verging almost on coma, existed for two days, and this unconsciousness was in no way dependent upon hypnotics.

The questions that arise are:—1. Had patient another disease along with the tetanus? 2. If so, what was it? May it have been typhoid fever? 3. Did the fever in its incubative, or latent state, give rise to the poison which induced the tetanus?

I am inclined to answer the first question in the affirmative. The case in point differs so essentially from all others I have seen or read of—traumatic or idiopathic, acute or chronic—that I believe another disease co-existed with it.

The second question is not so easily settled; yet Dr. Tilston and myself, on the twelfth, were of opinion that malignant typhoid existed. Everything pointed to it; the smell of the breath and of the stools were almost pathognomonic of it, and yet on the fourteenth, two days later, we were inclined to think ourselves mistaken. What think you?

The answer to the third question, of course, hinges on your reply to the second; but it seems to me that if, in the first instance, tetanus is a blood poison, that poison may as well be developed, or absorbed, in a minute typhoid intestinal lesion as in a break or a lesion of the surface of the skin.

I cannot conclude without expressing my thanks to Dr. Tilston for the kind assistance he rendered me in this anxious yet interesting case.

# THE INFLUENCE OF THE COLD BATH TREATMENT ON THE HOSPITAL MORTALITY OF TYPHOID.

READ BEFORE THE QUEENSLAND MEDICAL SOCIETY.

By F. W. E. HARE, M.B., M.R.C.S.E.,

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THE treatment of Typhoid by systematic cold bathing has now been on a very long and extensive trial. Introduced into Germany more than twenty years ago by Brand, of Stettin, it has become all but universal in that country, and more

recently has found favour in the South of France, London and Paris. Yet on no single occasion that I can discover has its introduction failed to be followed by a very considerably reduced death-rate. In this paper I shall endeavour to show that the same result has been obtained at the Brisbane Hospital.

The treatment was commenced on January 1, 1887, and since then every case that required it has been systematically bathed, in the absence of the usual contra-indications.

Table I. shows the mortality of the hospitals (for adults) in Sydney and Brisbane, during the three years ending December 31, 1888 :—

TABLE I.

	Coast Hospital.			Prince Alfred.			Sydney.			St. Vincent's.			Brisbane.		
	Admissions.	Deaths.	Mort'ly % cent.	Admissions.	Deaths.	Mort'ly % cent.	Admissions.	Deaths.	Mort'ly % cent.	Admissions.	Deaths.	Mort'ly % cent.	Admissions.	Deaths.	Mort'ly % cent.
1886.	400	56	14.0	197	34	17.3	106	24	22.2	79	13	16.4	464	68	14.6
1887.	286	36	12.6	161	23	14.3	72	12	16.7	59	9	15.2	239	27	11.3
1888.	241	15	6.2	195	40	20.5	97	19	19.6	93	8	8.6	339	23	6.8

From this it appears that since the introduction of the bath treatment into the Brisbane Hospital, the mortality has been lower than in any of the others, with one exception. At first sight the Coast Hospital, during the year 1888, appears to have the advantage. The whole mortality on cases admitted during the year is 6.20 per cent., but, excluding one case that died within forty-eight hours of admission, 5.8 per cent.

During the same period at the Brisbane Hospital the following cases occurred :—Two admitted with perforative peritonitis, who lived, respectively, one hour and 24 hours; one flooding from abortion, who lived about 36 hours; and one in a profound typhoid state, who lived 44 hours.

Excluding these four, the Brisbane Hospital mortality for 1888 would be 5.7.

Again the mortality among young children is usually admitted to be trifling compared to that of adults. During the year under consideration six only, under the age of 10, were admitted into the General Hospital, such cases being sent, with few exceptions, to the Sick Children's. At the Coast Hospital 24 are included. In comparing the results at the two institutions, these cases (whose mortality was nil) should also be omitted.

This would give the Coast Hospital a mortality of 6.9 per cent., the Brisbane Hospital one of 5.7 per cent.

Against these figures there is but one objection that can be urged, and that is that at the Coast Hospital a larger proportion of cases have been classified as febriculæ.

The numbers are :—Coast Hospital, 241 cases of typhoid, and 60 of febriculæ, or 19.9 per cent. of the whole. Brisbane Hospital, 339 cases of typhoid, 50 febriculæ, or 12.8 per cent. of the whole.

From this it might be argued that the term typhoid is used in a more restricted sense at the former institution, and that therefore the comparison falls through.

Now there can be little doubt that the milder forms of typhoid, the so-called febriculæ, are more common in children, and, therefore, from this point of view alone, a larger proportion of these affections might be expected to find their way into the Coast Hospital. But laying this consideration altogether aside, and excluding as febriculæ from the Typhoid Table of the Brisbane Hospital, the same proportion of cases as at the Coast Hospital (with the same deductions for moribund cases and children as before) the former Institution would still have slightly the advantage.

The fact is, however, that the mortalities of the two are not fairly comparable at all. "Experience having proved that the journey to the Coast Hospital is very injurious to typhoid fever patients in the advanced stage of the disease, the majority of these are sent to the City Hospitals."

Selection of cases, therefore, while it influences unfavorably the death-rate of the latter has an opposite effect on that of the former.

Now the Brisbane Hospital being the only one for adults in the district, occupies an intermediate position, receiving alike all classes of cases,

mild and severe, whether in the early or later stages of the fever. For this reason a comparison of its results with those of the Coast Hospital on the one hand, or those of the City Hospitals of Sydney on the other, would be equally unfair, though in opposite ways.

Obviously the only fair comparison is with the average results of the Sydney Hospitals for adults. Table II. shows this for the two years that the bath treatment has been in use in Brisbane.

TABLE II.

Year.	Sydney Hospitals (Adult)			Brisbane Hospital		
	Admissions.	Deaths.	Mor-tality % cent.	Admiss'n's	Deaths.	Mor-tality % cent.
1887.	578	80	13·8	239	27	11·3
1888.	626	82	13·1	339	23	6·8
Totals for the 2 Years.	1204	162	13·4	578	50	8·6

These figures are, I think, sufficiently large to exclude the element of chance. It might be urged however, that the type of the disease is of less severity in Brisbane than in Sydney. But to render this contention of any importance, it must be proved that the reduced mortality is not limited to the two years in question. On enquiry however, the contrary is found to be true.

Table III. shows the admissions into the Brisbane Hospital, with the deaths and death-rates from May 15, 1882, up to December 31, 1886, i.e., up to the time when the bath treatment was begun.

The last two columns show the febriculæ separately classified, with the proportion that they bear to the total admissions in each period.

TABLE III.

Year.	Admiss'ns.	Deaths.	Mor-tality % cent.	Febriculæ admitted.	Percentage of Febriculæ to total adm'sns.
1882. From May 15	147	25	17·0	31	17·4
1883.	273	40	14·6	27	9·0
1884.	575	89	15·5	28	4·6
1885.	369	49	13·3	39	9·5
1886.	464	68	14·6	78	14·4
Totals.	1828	271	14·8	203	9·9

It is evident therefore, that if typhoid is of less severity in Brisbane than in Sydney, it has only been so since the end of 1886.

The bath treatment, as already stated, was begun at the beginning of 1887. During the

first six months, however, owing to inadequate arrangements, it was but inefficiently carried out. There was at that time but one moveable bath, and both wards were quite full. Consequently the bathing, though regular, was infrequent. Inexperience too, as may readily be imagined, caused some timidity in pushing the treatment, and as a result, the baths were given too warm and of too short duration. This fact had a marked influence on the mortality of the time, as will presently appear.

Now to show plainly the results of the bath treatment, the whole time from May 1882 to June 20 of the present year may be divided into three periods.

The first extends to December 31, 1886. During it cases were treated by drugs or expectantly, sponging and cold packs being occasionally resorted to.

The second included the first six months of 1887, when the bath treatment was used, but imperfectly, and the third from July 1, 1887, up to June 20 of the present year, represents the period of strict bathing according to Brand.

Table IV shows the results in the three periods. The febriculæ columns are as in Table III.

TABLE IV.

Periods.	Cases of Typhoid admitted.	Deaths.	Mortality per cent.	Febriculæ admitted.	Percentage of Febriculæ to total adm'sns
First—of expectancy, May 15, 1882, to Dec. 31, 1886.	1828	271	14·8	203	9·9
Second—of incomplete bath treatment. Jan. 1 to June 30, 1887.	171	21	12·3	36	17·4
Third—of strict bath treatment. July 1, 1887 to June 20, 1889.	797	56	7·0	107	11·8

Seventeen cases not yet convalescent are not included in these figures.

The third period then, though treated as rigorously as the first with regard to the exclusion of febriculæ, shows a mortality of less than one-half.

The percentage of 7·0, though representing accurately the hospital death rate, must not be understood as the mortality of cases fairly submitted to Brand's treatment. Of the 56 fatal cases, four died within 48 hours, three more in less than 72 hours, while in eight others the treatment was deemed inapplicable. Of these latter three were suffering from old-standing organic diseases, which had a larger share in contributing to the fatal result than the fever; three were in a state of advanced prostration from complications; while the other two were not diagnosed during life.

Excluding these 15, we have a series of 782 consecutive cases treated, with few exceptions, according to Brand's rule, with 41 deaths, or a death-rate of 5·2 per cent.

So much then for the general mortality. It is advisable, however, to enquire how this result has been brought about. Although the modes in which the fatal event occurs in typhoid are many and various, they may be roughly grouped in two classes.

(1.) Death directly due to the intestinal ulceration, and therefore peculiar to enteric.

(2.) Death from causes due to the febrile state, and consequently more or less common to all fevers.

Under the first of these headings are syncope from hæmorrhage and perforation of the gut. Under the second such cases as toxæmia, asthenia, pneumonia, coma, &c., may be mentioned.

Now it is mainly against the latter class of dangers that the bath treatment is directed, and consequently if it can be shown that it is effectual in this direction without influencing unfavourably the course of the intestinal ulceration, a very strong case, it seems to me, will have been made out in its favor.

During the year 1886 (the latter part of the period of expectancy) there were 68 deaths. Of these, 24, or rather more than one-third, were immediately due to hæmorrhage or perforation.

During the following two-and-a-half years (the whole bath period) 77 deaths occurred, of which 41, or over half, were the direct result of one or both of these accidents, so that the intestinal lesion rises considerably in importance.

So far, this might be due to an actual increase in the frequency of these two complications. That the increase is merely relative, however, can be at once seen on comparing the number of deaths from these two causes, with the number of cases admitted in either period.

Of 464 admitted in 1886, 24, or 5·2 per cent., died from hæmorrhage or perforation.

Of 968 admitted during the following two-and-a-half years, 41, or 4·2 per cent., died from the same causes. There is thus a slight but actual decrease in the frequency of these accidents.

But the mortality from all causes was considerably lower in the bath period, 8·6 against 14·6. It is evident, therefore, that the reduction has been mainly effected by averting, to a great extent, the tendency to death by asthenia, pneumonia, coma, etc., conditions common to the febrile state, however induced.

Among these pneumonia, as a cause of death, has been especially infrequent, and this is of interest, inasmuch as the danger of inducing this complication has been one of the main arguments against cold bathing. In 1886, to pneumonia 10

fatalities were attributed, giving a mortality to this cause alone of over two per cent. Since then it has only occurred in four fatal cases, in one of which it was present on admission. Its mortality, therefore, during the bathing period has been but one-half per cent. Does not this suggest that many of our ideas as to the pathology of intercurrent pneumonia should be modified?

Plainly, then, the bath treatment causes no increased danger from the intestinal lesion, while it is an effectual remedy against the consequences of continued pyrexia.

On this point it is interesting to observe the difference in results obtained in the two sexes. Murchison states that although the mortality among males is rather less than among females, yet they are more liable to perforation in the ratio of 2·3 to 1. Of late years at the Brisbane Hospital, perforation has been about twice as frequent in the male sex, and hæmorrhage, also, has been more common in men.

From this it might be anticipated that the introduction of the bath treatment, essentially an anti-pyrexial measure would influence more favorably the female than the male mortality. And this, on examination, proves to be true to a rather startling extent.

During the period of expectancy 1,160 males were admitted, of whom 164 died, a mortality of 14·1 per cent., while of 668 females 107 died, a mortality of 16·0 per cent. These figures correspond very nearly to those quoted by Murchison, but they are in marked contrast to the results of the last two-and-a-half years.

During this period 609 males were admitted, of whom 57 died, a mortality of 9·3 per cent., while of 359 women, 20 only succumbed, a mortality of 5·6 per cent. This greater success in women is obtained in spite of the extra dangers incurred through pregnancy. Were it not for this, the difference would be even more marked. In three of the 20 fatal cases, abortion was the immediate cause of death, either by causing hæmorrhage, or giving rise to septicæmia.

Of the remaining 17, three were hopeless when admitted, and died in less than 72 hours. The mortality, therefore, in non-pregnant women, not moribund on admission, would be under four per cent.

This result, on examination, is found to be due to the comparative immunity enjoyed by women from the consequences of deep intestinal ulceration, more especially perforation.

Although some of the difference between the male and female death-rates, is, probably, due to accidental causes, yet it must be admitted that under the Bath treatment, the prognosis is considerably more favourable in women.

In conclusion, taking all the data into consideration it must, I think, be conceded that the introduction of the cold-bath treatment, and the fall in the death-rate, during the last two-and-a-half years, stand to each other as cause and effect. Otherwise it would be necessary to assume :

(1) That the type of the disease, which, so far as can be judged by the mortality, had for five years been similar to that in the other Colonies and in the old country, suddenly underwent a change at the height of the fever season, in January, 1887.

(2) That the change was limited to Brisbane.

(3) That the milder form of fever has since persisted ; and finally,

(4) That the alteration in type was of so selective a nature, that while it greatly lowered the mortality from pyrexial causes, it left the dangers arising from the intestinal lesion, practically unaffected.

#### CASE OF FRACTURE OF CERVICAL VERTEBRÆ, WITH DISLOCATION OF THE ARTICULAR PROCESSES.

REPORTED BY J. EMSLIE MACLENNAN, M.B., &c.,  
HOUSE SURGEON, PRINCE ALFRED HOSPITAL,  
SYDNEY.

By the courtesy of Mr. Twynam, honorary surgeon to this hospital, I have been enabled to report the following interesting case which was under his care.

Belinda Rajaput, an Indian hawker, was admitted on 11th January last, suffering from an "injury to his back." From the history given by the patient and his friends, it was made out that he had received some injury to the spine through being knocked against the side of a doorway and subsequently falling down a flight of steps.

On careful examination, the points to be made out were paralysis of both upper extremities, the right not being so complete as the left, and tenderness on pressure over the lower cervical spine much increased by movement. The urinary bladder was distended, and there was a tendency to diarrhoea. There was no appearance of contusion on any part of the body. He lived for eighteen days, during which the following clinical observations were made, viz : paralysis of the sphincter of the bladder, followed by that of the bowels. Subsequently he had recurrent attacks of the pain referred to, the left shoulder and side of chest becoming more severe and prolonged towards the end, causing him to utter loud cries. A week after admission, symptoms of oppression of the breathing were observed, and on examining the chest, tubular breathing and subcrepitant râles could be made out at various spots, especi-

ally towards the bases of both lungs, and more marked on the right than the on left side. The respirations were never more than 22 per minute. The temperature chart showed several rises over 101°, falling at other times considerably below normal. Before death it reached 106°. He took nourishment well. It was particularly observed that the power of movement in the lower extremities was not in the slightest degree impaired, while sensation was equally unaffected. The motor paralysis was entirely confined to the upper extremities, and in neither the upper nor the lower could any definite loss of sensation be made out up to the last, the same remark applying to the neck and trunk.

A *post-mortem* examination was made by the pathologist to the hospital, who made the following notes :—"Bed-sore over sacrum ; skin over cervical region, tough and leathery, apparently from applications during life ; heart healthy but small ; right lung had a nodular feel, and on section was greatly pigmented, and showed numerous broncho-pneumonic nodules ; both lungs were emphysematous at the apices, and showed traces of old mischief. The abdominal viscera were considerably congested. There were a few slight peritoneal adhesions on the liver, of old standing, and the spleen was completely adherent to the diaphragm by old fibrous adhesions. On examining the spinal column after reflexion of the spinal muscles, the spine of the axis was found to be irregular, presenting a sharp point as if from fracture. The cervical part of the spinal column was removed from the axis to the seventh cervical vertebræ inclusive, and on close examination there was found to be a dislocation on the right side between the articular process of the third and the fourth cervical vertebræ, the superior articular process of the fourth vertebræ having its articular surface bare and looking backwards, while the corresponding surface of the inferior articular process of the third vertebræ was carried forwards. Portions of each of these processes had been fractured so as to allow of the dislocation taking place. The bodies of the third and fourth cervical vertebræ were also extensively fractured, the column having evidently been crushed and bent forwards in this region. The spine of the axis had one of its tubercles fractured and depressed, but union had occurred in the depressed position. The spinal column was removed throughout, almost its entire length. It was firm in consistence below, and somewhat softer in the cervical region. There were a few delicate adhesions in the sub-arachnoid space throughout the length of the canal. On section no definite naked eye lesions could be observed in the cord itself.



*Remarks.*—The points which seem worthy of note in this case are: First—that there was apparently no paralysis of the diaphragm, although the injury was situated about the level of the place of exit of the fibres of the phrenic nerves. Second—that there was no loss of sensation or motion of the lower extremities, nor of sensation in the upper, and therefore no complete transverse lesion of the spinal cord. Third—that paralysis of the sphincter of the bladder came on first, and was followed by that of the bowels. Fourth—that in the absence of indications for diagnosis it would seem advisable to treat all obscure injuries of any severity in this region as for fracture by rendering the part completely immovable.

**A CASE OF OSTEO-CHONDRO-SARCOMA OF HEAD OF THE TIBIA.—AMPUTATION, FOLLOWED BY THE DISEASE APPEARING IN OTHER BONES.**

READ BEFORE THE MEDICAL SECTION OF THE ROYAL SOCIETY OF NEW SOUTH WALES.

By W. H. GOODE, M.A., M.D. *et* CH.M.,  
DUBL., HON. SURGEON TO THE SYDNEY  
HOSPITAL.

A. W., aged 15, was admitted into the Prince Alfred Hospital on March 29, 1888.

On admission she was found to have a large swelling below the left knee joint. The joint was not affected by the disease, and there was no pain on passive motion. The surface of the swelling was red and shining, and on it were several large veins.

On the inner and upper side arterial thrill was felt, and on listening with the stethoscope a bruit was heard, which was most distinct where the thrill was felt. The growth did not seem expandible either to the sight or touch.

On tracing up the anterior edge of the tibia to the tumour, the true bony feel was gradually lost. The growth seemed harder in some places than in others, but there was no true bony hardness to be felt, nor was there any glandular enlargement. The spleen did not seem to be increased in size. On examination of the chest a wavy inspiration was heard in front, over the apex of the left lung, and the breath sounds were found to be weaker on the right side than on the left. The girl was greatly emaciated, and the muscles of the thigh were greatly wasted.

The previous history of the case, as related by the girl's father, was that eleven months before coming to the hospital she fell and hurt the leg, which a month afterwards was noticed to be uniformly swollen. Three months after the injury the swelling was as great as on admission. There was no pain.

Her temperature on the day after admission was 101·8 deg. F., and it continued to be over 100 deg. until April 4, six days after admission, when, as the tumour was growing rapidly, after consultation with my colleagues, I removed the limb at the junction of the middle and lower thirds of the femur. The patient made a rapid recovery. The wound united by the first intention and she was discharged on May the 5th, looking well and rapidly increasing in flesh. I heard nothing of her since, until I received a letter from Dr. Montague Evershed dated the 8th of the present month (September 1888) in which he says: "After returning to the country her health was very good for a few weeks, then a swelling appeared in the lower part of the spine, over two or three of the lumbar vertebrae, a few weeks afterwards the sternal end of the left clavicle enlarged, then a prominence appeared over the middle bone of the sternum, followed by anasarca in the foot, gradually extending over the whole body, and towards the end almost suppression of urine, death occurring a few days ago." I am indebted to Dr. John A. McAllister, Medical Superintendent, for the notes of the case, and also for the sections of the tumour which I exhibit here to-night. In reference to the character of the tumour he writes the following: "It is a very good specimen of *osteo-chondro-sarcoma*, composed mainly of a cartilaginous matrix tending to ossify at parts and crowded with sarcoma cells. These cells present all the characters of rapid growth, namely, large-sized nuclei shewing in places commencing division, while in others the process of division of the nuclei is completed, and there are two, three or even more nuclei within the same cell; these nuclei are also very large in proportion to the size of the cell, and the intranuclear network is well marked.

"I thought that the growth would soon recur in internal parts after the operation, if it had not already commenced in them at that time. The history of the case subsequent to the operation is interesting, as showing the tendency of the growth to implicate similar structures to those in which it originated, viz., the bones."

THE Public Health Bill, which is now before the Victorian Parliament, was unequivocally condemned by a conference of Municipalities, convened by the City Council of Melbourne, which was held at the Melbourne Town Hall, on July 6; about 40 municipalities were represented.

## PROCEEDINGS OF SOCIETIES.

NEW SOUTH WALES BRANCH OF THE  
BRITISH MEDICAL ASSOCIATION.

GENERAL Meeting held in the Royal Society's Room, Sydney, on Friday, 7th June, 1889, at 8.15 o'clock. Present: Dr. Fiaschi (President, in the chair), Drs. Quaife, Cohen, Shand, Worrall, Wilkinson, Scot-Skirving, Crago, Brady, Lyden, Hodgson, Fisher, Parker, Clubbe, E. F. Ross, Todd, Rennie, O'Reilly, Garrett, McCulloch, and the Hon. Dr. Creed, M.L.C.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the death of Dr. Nott, of Woollahra.

DR. SCOT-SKIRVING proposed, and Dr. Quaife seconded, that "a letter of condolence be forwarded to Mrs. Nott, sympathising with her in the loss she has sustained by her husband's death."

The HON. SECRETARY (Dr. Scot-Skirving) read a letter from the President-elect of the British Medical Association, asking that a representative from the New South Wales Branch be sent to the annual meeting to be held in August of this year at Leeds, England.

The Hon. DR. CREED proposed "That the Hon. Dr. MacLaurin be appointed to represent the Branch at the annual meeting of the B.M.A." Carried.

The PRESIDENT (Dr. Fiaschi) announced that Drs. Bancroft and Harold Browne had been elected members of the Branch and Association.

The Hon. DR. CREED, M.L.C., AND DR. SCOT-SKIRVING read a paper on "Two cases of acute yellow atrophy of the liver (!)" in which recovery took place.

DR. E. FAIRFAX ROSS said he had only seen one case of yellow atrophy of the liver. The woman was in poor circumstances, and was brought to St. Vincent's Hospital, she was perfectly comatose, and on examination a large tumour, resembling in shape and size a lemonade bottle, was found on the right side of the abdomen. The woman died a few days after admission, and the *post-mortem* showed that the tumour was a large blood clot, perfectly black. There was one question, he (Dr. Ross) would like to ask the authors of this paper, *i.e.*, whether the liver was any larger than usual, after recovery.

DR. CLUBBE said Drs. Creed and Scot-Skirving had to be congratulated upon the success of their treatment in the cases under review. The only case of this description he (Dr. Clubbe) had seen was during his practice in London. The patient was an ironworker. The temperature on the day after admission went up to 104° and the following day fluctuated very much, and jaundice appeared. He died on the fourth day. The liver weighed 48 ounces.

DR. WORRALL said he had listened with pleasure to the papers just read, but was not quite clear that the cases were yellow atrophy of the liver. He (Dr. Worrall) remembered one case of this kind which occurred in a pregnant woman about four days before her confinement, she was jaundiced and had frequent convulsions, and died on the third day. The child was born alive and was not jaundiced. Yellow atrophy of the liver is of very rare occurrence, the name itself implies wholesale destruction of the liver cells, and how these cells are to be renewed is more than he (Dr. Worrall) could say.

DR. TODD said that since he came into the room this evening he had learned that he had seen a case of yellow atrophy of the liver, as the case mentioned by Dr. E. F. Ross came under his (Dr. Todd's) notice before

going into St. Vincent's Hospital. The cases under discussion do not appear to be cases of acute yellow atrophy of the liver. The destruction changes are so intense that recovery is next to impossible.

DRS. CRAGO, WILKINSON, and RENNIE also took part in the discussion. DR. WILKINSON did not think them to be true cases of acute yellow atrophy. DR. RENNIE quoted a case of Fagge's, where recovery was believed to have taken place.

DR. FIASCHI said it would be very interesting to collect information on the subject of acute yellow atrophy, as there appeared to be a great deal of doubt about the matter. He (Dr. Fiaschi) could only remember two cases of this description.

The HON. DR. CREED, in reply, said that, of course, in the fortunate absence of a *post-mortem* it was impossible to be absolutely sure of the real nature of these two cases. If they were not genuine cases their clinical history was a marvellously close simulation of those in which an autopsy had justified an *ante-mortem* diagnosis of acute atrophy. He would point out to one speaker, that so far as careful percussion showed, the hepatic dulness in one case had become greater after recovery than it was during the disease. In future cases he would be inclined to adopt similar treatment to that used on these two occasions.

DR. SCOT-SKIRVING, in reply, said that he gathered from the opinions expressed by the speakers that there was only one pathognomonic sign of this disease, and that was the death of the patient. If it be true—as he thought—that recovery sometimes did take place, the explanation was that the whole of the liver was not destroyed, but sufficient remained for the needs of the body. He greatly regretted that the amount of urea in these cases had not been estimated, and the insufficient search for leucin and tyrosin in the second case. Finally, he still remained in doubt as to the real nature of these two cases. Although far from dogmatizing on the point, he wished to believe they were genuine cases. Such a belief opened up the possibility to giving not invariably an absolutely hopeless prognosis.

DR. WILKINSON exhibited a case of Diphtheritic paralysis, and explained the case.

DR. BRADY exhibited some long hair from dermoid tumour of the scalp behind the ear.

DR. WILKINSON read a paper on a case of heart-disease—with exhibit and microscopical sections.

DR. SHAND, of Penrith, read a paper on a case of Fibro-cystic tumour removed from the body of the uterus, and exhibited the specimen.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH  
MEDICAL ASSOCIATION.

ANNUAL Meeting, held at the Adelaide Hospital on June 27th, 8.30 p.m. Present: Dr. Stirling, President, in the chair; Drs. Davies Thomas, Gardner, Verco, Gault, Cookson, Lendon, T. K. Hamilton, Anstey Giles, H. Marten, Cleland, Corbin, A. E. Wigg, Todd, Swift, Stewart, Clindening, Mackintosh, Hayward, Ewbank, Mitchell, A. A. Hamilton, Symons, Professor Watson, and the hon. Secretary (Dr. Poulton). Dr. Crowther was present as a visitor.

## EXHIBITS.

Exhibit by the PRESIDENT (Dr. E. C. Stirling):—Calculus, reported on lay but accurate authority, to have been extracted from the stomach of a kangaroo. Weight, 118 grams; composition, oxalate of lime. This substance being in the darker layers coloured with a brown organic material readily soluble in alcohol, and, therefore, presumably chlorophyll. The nucleus of the calculus consists of the same colouring matter mixed

with vegetable fibre. I am informed that in the country where the specimen was obtained there is much of an acid sorrel-like plant, of which kangaroos are very fond. This may have been the source of the stone.

Gastric calculi are not unfrequently met with in herbivorous animals and when mineral are usually phosphatic in character. I have not previously met with one occurring in the kangaroo, nor have I seen one of similar composition.

Dr. POULTON showed the ilium and the femur from an unsuccessful case of hip excision in a girl aged 16. The disease had been treated in the country for two years; the subject died three days after excision in the hospital. The specimens showed the very extensive disease of ilium, so often accompanying morbus coxae.

Dr. POULTON showed, for Dr. Bickle, the bladder and prostate of a man æt. 81, and a hydatidiform mole.

Dr. T. K. HAMILTON exhibited a case of a neuropathic condition of a portion of the left cornea, depending, apparently, upon a "chronic catarrhal rhinitis with hyperplasia" on the same side.

Dr. GARDNER showed an endoscope.

Professor WATSON showed a preparation illustrating an unusual case of luxation of the humerus.

Minutes of previous meeting read and confirmed.

Apologies for absence received from Dr. J. A. G. Hamilton, Dr. Bickle, and Morier.

Letter received from Mr. Wheelhouse, President elect B.M.A., inviting the Branch to send a representative to Leeds in next August.

The annual reports of the Council and the Treasurer were read as follows and adopted:—

#### ANNUAL REPORT.

The Council has pleasure in reporting that your Branch has during the past year continued to give satisfactory evidence of its vitality and usefulness. The financial position is sound, and the number of members has increased. Eight new members have been elected, and two whose subscriptions had lapsed have been restored to the roll, which now numbers eighty names. No member has been lost by death during the past year.

The Branch has held nine ordinary monthly meetings, and the following papers have been read:—On Erythema Nodosum, accompanied by unusual eye symptoms, by Dr. BICKLE; on Nephrolithotomy, by Dr. GARDNER; on Suprapubic Lithotomy, by Dr. GARDNER; on Cholelithotomy, by Dr. THOMAS; on a case of Intestinal Obstruction, by Dr. CAWLEY; on Nephrectomy, by Dr. GARDNER; on a case of Foreign Body in the Larynx, by Dr. COOKSON; Notes on Ear Practice, by Dr. W. ANSTEE GILES; Notes on a Case of Hydrocele with Milk-like Contents, by Dr. STIRLING; on Tracheotomy in Diphtheria, by Dr. SWIFT; on Three Cases of Diphtheria, by Dr. HAYWARD; on Retroflexions of the Gravid Uterus, by Dr. GARDNER; a case of Cholecystotomy, with unusual symptoms, by Dr. GARDNER; on Cholelithotomy, by Dr. WAY; on Cholelithotomy, by Dr. LONDON; on Sarcoma of the Lung, by Dr. THOMAS. Members have also shown numerous instructive pathological specimens.

The second meeting of the Intercolonial Medical Congress, held in Melbourne during January, received the cordial support of this Branch, and members laid before Congress many papers which would otherwise, in all probability, have been read before you here. Although the literary record of the Branch has been thus, perhaps, diminished for the year, your Council has been gratified in noticing the marked attention which was accorded in Congress to the contributions of many of your members.

In the annual report of last year your Council noted the failure of representations made to the authorities with respect to the *threatened* pollution of the water supply of this city, and your Council have to inform you that they have reasonable grounds for reporting that the Hope Valley reservoir is now being actually contaminated by the drainage of its catchment area. You will be invited again to take this matter into consideration.

Last year the Council reported, with satisfaction, the publication of your proceedings in the *Australasian Medical Gazette*; they have now, by consequence of a motion passed in March, to place the whole matter of the publication of transactions in your hands for final settlement.

You will also be asked to amend by-laws with reference to the election of members and the payment of subscriptions, and to consider new by-laws touching the conduct of and business at the ordinary meetings.

The receipts for the year amount to £160 9s. 7d., and the expenditure has been £158 19s. 3d.; there is now to the credit of the Branch in the Savings Bank a balance of £117 2s. 2d.

The by-laws were altered to ensure the election of new members by a majority of not less than three-fourths, and reducing the subscription of members elected after June in any year.

Dr. POULTON gave notice that he would move for the adoption of new by-laws to regulate the conduct of meetings and the exhibition of specimens.

The SECRETARY reported the action of the Council in the matter of publication of the proceedings, and read a motion passed in Council in favour of publication by the *Australasian Medical Gazette*.

Members were asked to record their votes for members of Council and to express their views as to publication of proceedings, it having been first decided, on a definite motion, that the recorded votes of absent members should be counted as valid. Drs. Verco and Cleland were appointed scrutineers.

Dr. E. C. STIRLING, M.A., M.D., F.R.C.S., the retiring President, then read the following

#### ANNUAL ADDRESS.

THE practice of our Association, happily inaugurated by our late lamented friend, Dr. Charles Gosse, has been for your retiring President to deliver an address on some medical or kindred subject in which his interests lie, or with which he trusts he is especially familiar.

It is with some hesitation that I do not follow immediately in the footsteps of my respected predecessors, and present to you my interpretation of some of the great medical or surgical questions of the day; and if I am thus led to depart from a practice which has become sanctioned and approved by our past experience it is because I think I may not unprofitably deal with a subject which, though not in itself scientific, is nevertheless closely associated with the welfare and scientific status of our profession in South Australia, and thus it may still be not without some interest to a large number of my honoured colleagues. Partly for these reasons, but partly also, I must confess, because the recent Medical Congresses in Adelaide and Melbourne have made great demands upon such spare time as a teacher can devote to purposes of working out and elucidating

special questions either of practice or theory. I propose to offer a few remarks this evening upon some central features and factors of medical science and medical life in South Australia. I shall briefly remind you of some of the events of the last few years, during which changes, many and great, have taken place in the methods and surroundings of our profession. I shall endeavour to draw from these a good augury for its future progress; and I shall presume to indicate not only where our strength but our weakness, as a body, lies, and where also, in the matter of medical education, I think, we are open to improvement.

It is often said, and said truly, that the members of young communities are intolerant of adverse criticism, independently of its motives or justice when it comes from an alien source. Australians, as well as Americans, have laid themselves open to this charge, but if, as in this particular instance, it is one of your own body corporate who is speaking of himself as well as of his medical brethren, I fear human nature supplies the strongest possible reason for making any criticisms as favourable as possible, and I am aware, therefore, that this circumstance may be held to weaken the force of my remarks.

I believe it is to that universally beloved and respected member of our profession, Dr. Charles Gosse, that the first steps were taken towards the recognition by our profession in South Australia of those subdivisions of our craft, which the progress of medical science has made absolutely necessary for precise and careful work of the best kind. When Dr. Gosse began to move in the matter, as many of us remember, the staff of the Adelaide Hospital—of whom he was one—were simply honorary medical officers, each one being in charge of every kind of case that presented itself during his week, whether medical, surgical, or special.

Chiefly owing to Dr. Gosse's exertions, he succeeded in inducing the Board of Management to establish an Ophthalmic Department in the Hospital, and with absolute unanimity the Board recognized his peculiar fitness and claims to be the first occupant of the new post—that was in 1881. His portrait hangs in the ophthalmic ward in testimony of the respect and affection in which he was held by many friends and colleagues.

Not long after this—in 1882—it became obviously apparent that it would be of advantage to the Hospital inmates if the medical patients were divided from the surgical, and each kind placed under the care of physicians and surgeons respectively. This proposal was, in the first place, a matter of arrangement between the then existing staff, and, I think, it speaks well for those concerned that, in a comparatively short time, such a perfect agreement between them was arrived at as enabled them to present to the Board a scheme in which all concurred, for the subdivision of the Hospital wards into a medical and surgical side. The scheme was unanimously adopted, and I have no hesitation in saying that this arrangement has worked immensely to the benefit of all concerned. No one, I fancy, would wish to return to the practice of the old days when accidents, operations, eye cases, phthisis, enteric fever, and all manner of complaints were indiscriminately mixed up in the same ward and under the care of the same visiting officer. Every man has his bias. The surgically-minded man does not take the interest in the requirements of auscultation and percussion which the necessities of the case demands, even should he possess the skill which is only derived from constant practice in this kind of work. Nor has he usually the time or inclination to follow Pharmacy in its bewildering search after new and better drugs, as well as those more accurate and precise methods of administration on

which the future of medicine will so greatly depend. And if the medically-minded man occasionally has, as we must, I think, admit, a hankering after the more brilliant, because more obvious, results of surgical practice, one may at least say that the surgery of the present day brooks no divided allegiance, and both requires and demands a whole-hearted attention, not so much to its multitudinous details as to its ever widening scope.

Still more recently the pathological work of the hospital has been placed upon a more satisfactory and convenient basis by the appointment of Professor Watson as Pathologist. This gentleman has it in his power to render the most important services, not only to the physicians and surgeons of the hospital, but to Medical Science in South Australia, by being responsible for the keeping up of an unbroken record of all *post mortem* examinations for purposes of future reference. In such records it is absolutely necessary that there shall be no break of continuity, and it is the want of continuity which to a large extent minimises the value of such records. The idea of subdivision of work was confirmed and extended by the appointment of assistant physicians and surgeons, and only within the last few weeks a still further step in the same direction has been taken by the institution of special departments for diseases of women, of the skin, and of the ear. The predisposing cause of these changes being the outcome of the tendency of the age towards specialisation, the exciting cause, the exigencies of teaching requirements in the medical school, of which I shall have to speak directly.

Meanwhile, there have been great changes in the country also. The rapid growth in the population which took place some few years ago, which has, unfortunately, not continued in recent years, led to the establishment of hospitals in various centres of population.

Port Adelaide, Mount Gambier, Burra, Port Augusta, Port Lincoln, Wallaroo, Clare, Kapunda, Narracoorte, Jamestown, each became possessed of its hospital, placed, perhaps necessarily, under government auspices, which is not in all respects the most favourable for development; and thus many cases that in former times would have found their way to Adelaide were treated in the country hospitals, but in spite of this, cases of a certain character still have a tendency to gravitate towards the metropolis, and I think it is evident from the records of the Adelaide Hospital that in this class of cases there has been no falling off of admissions to the Adelaide. Rather, I think, the contrary.

While the structure of our hospital buildings leaves much to be desired, according to our present ideas of hospital construction and sanitation, many alterations and undoubted improvements have been made of late. But still we must look forward to the time when it will be admitted that a new hospital means a wiser expenditure of public money than additions to palatial parliament buildings. That this idea is prevailing, I think, is evident from the fact that the new block comprising an operating theatre and four small wards for the accommodation of grave operation cases was readily approved by the Board of Management and speedily sanctioned by the Government. The new buildings have been designed with the view that they will still be available in any new entire structure that may be erected.

So much for certain changes in the economy of the Adelaide Hospital, which, with the establishment of the country hospitals, must be important items in the medical history of our colony. I now come to the school of medicine. Its work may be said to have

begun by the appointment in the University of Professorships of Anatomy and Chemistry, and a Lectureship in Physiology and Materia Medica in the beginning of 1885. Intended at first to supply only the medical education proper to the first two years, it was afterwards resolved, not without some opposition from medical as well as lay sources, to complete the curriculum, and the necessary lecturers were appointed from amongst resident medical practitioners. The school has now entered upon its fifth year of existence and numbers 29 students, some of whom will doubtless receive degrees at the end of this their final medical year.

I may be challenged for venturing to offer criticism on an institution in the establishment and working of which I, in common with several whom I address, have had some share, but I hope it may be said, at least, that it has been the desire of those connected with the school to make it as creditable as possible. The duration of the curriculum of five years, short enough as it is, is longer than in some of the schools which we hold in good repute; the examinations are certainly pitched at a high standard, and the services of gentlemen connected with other schools are obtained in all the more important of them, so that the character of our work is known outside. Though the hospital from which the clinical opportunities are derived is not very large, yet it is larger than many where good work is done; and except in the matter of the class of accidents and diseases, which are so frequent in large manufacturing towns, it generally contains a good variety of cases. Above all things, I think it may be claimed that the students here, both collectively and individually, receive, both in book teaching and in clinical instruction, an amount of personal attention which few of us ever received in our student days.

The recent establishment of special departments has made it possible to give such instruction as modern requirements demand, and save in the matter of midwifery in which, owing to existing arrangements, a difficulty has been experienced in obtaining a sufficient number available for attendance by the students, it has seemed to me that the school is working smoothly enough at the present time.

Its greatest want is, undoubtedly, a separate Professorship of Pathology who should also be qualified to undertake those bacteriological investigations which are so bound up with the modern ideas of infective processes.

I trust that before long the University will find itself in a position to make such an appointment, the want of which is experienced beyond the limits of the school.

There are, doubtless, those who still look upon the Medical School as unnecessary and premature, but I think the necessity is shown by the number of students applying for admission, many of whom would certainly have never been able to follow the bent of their inclinations but for the facilities which have been afforded here. The charge of prematurity has been made against many new but successful undertakings, and is difficult to deal with, as I am not aware of any standard by which it can be determined when it is the proper time for such an institution to be established. However, to argue these points would be now unprofitable, and whatever opinions we may have held, or may yet hold upon them, I am confident that one great result of the establishment of the school of medicine has been to promote immensely accuracy and thoroughness in the work of those who have been brought in contact with it.

It is impossible to be a teacher without being a learner also, and the conscientious discharge of tutorial duties thus becomes a valuable means of continuing a progressive medical education that is only too apt to lapse at the close of our student days. It may be said that this can only be a matter which affects those immediately concerned, but I take it that by thus inculcating and fostering a spirit of accuracy and enquiry, the benefits of a medical school may extend far beyond the radius of those directly connected with it, and may, by promoting an active and healthy *esprit de corps*, serve as a rallying point for all that is best in the profession at large.

It has happened to me to visit many hospitals in many lands, and I have never failed to be struck with the superior accuracy and thoroughness of the work performed in hospitals to which schools are attached, as compared with those in which the medical staff discharged their duties without the incentive for study and observation engendered by the necessity for teaching sound and accurate matter, and without the wholesome stimulus supplied by the presence of students who soon become more than potential critics of their teacher's work.

Again I say that the benefits of a medical school, in conjunction with a hospital, are not to the few only who are actively engaged in its work, nor, therefore, does it concern these alone. The fact of an earnest endeavour on the part of any body of our profession to raise itself to as high a standard of efficiency as possible by the exceptional means afforded to it in virtue of the exigencies of hospital work and clinical teaching cannot fail, I think, to be of advantage to the profession at large. We know that the circumstances of private practice often render it necessary that a patient should be sent to the hospital, and I have simply to ask the question whether a practitioner, who finds himself under that necessity, does not feel a greater confidence in sending his patient to an institution where the exigencies of teaching offer a considerable guarantee that its officials should be acquainted with their work than to one where such a guarantee does not exist, to receive an answer which is favourable to the existence of a school of medicine in connection with a hospital which is large enough to supply the necessary complement of cases.

To those who only see hopelessness in the chances of a successful career for some of our graduates, I would answer in terms that I have used elsewhere, that it may be that the struggle for existence is as severe in our profession as it is in others; all cannot succeed in it, and many will be disappointed, but there is this immense counter-vailing advantage, namely, that no training can be suggested which offers a better or even so good a training of the mind, such a technical education in the best sense of the term of eye, ear, hand, and muscle, in short such an all-round equipment both of suggestive and useful knowledge and of the means and methods of acquiring more of it than does the curriculum of our own profession. Surely, as a *means* of education alone, a medical education is worth a great deal, not to speak of the intrinsic value of the facts acquired, or of their usefulness and adaptability in all climes and countries.

The subject of the medical school leads me to make an observation on a fact bearing on the internal relations of the medical profession in South Australia which must be a source of pleasure to all, and that is the general good feeling and desire for cordial co-operation which, with very few exceptions, pervades its members. The differences amongst us have often been more conspicuous than our agreements, and so it

becomes a pleasant thing to contemplate an opposite state of affairs, and to recognise that amongst the members of our body in South Australia harmony has reigned, both in public and private matters. It is impossible to over-estimate the advantages which such a union brings, and I am sure it must be the sincere wish of all of us that such a state of things should long continue.

I wish it were possible to make the same kind of remarks upon our relations with the State. These I regret to say must be considered highly unsatisfactory. The Medical Acts of the colony which regulate the status of our profession are effete instruments which reduce to a minimum the obstacles which might be raised against the deception of a confiding public by the brazen effrontery and colossal ignorance of every quack and charlatan who may sojourn in the land. In spite of the considerable persistence and general unanimity with which the profession has sought for fresh legislation, based on the admittedly fair and reasonable ground that, while we do not desire to restrict people in their free choice of an attendant, we desire and claim that the law should at least make it possible for ignorant and thoughtless people to distinguish between the qualified and unqualified practitioner, if it desires to do so, and guard themselves, if they choose, from the dangers of unqualified practice.

There is nothing now to prevent the holders of certain degrees issued after a notoriously insufficient course of study, from being admitted here on the official roll of qualified practitioners, who would not be admitted in any of the other colonies. There exists no means of striking off our register the name of any member of our profession who has been found guilty of disgraceful or criminal conduct, even in cases when the names have been struck off the rolls of those bodies who originally granted the qualification. It is still not considered necessary that death certificates should be signed by qualified practitioners. Policemen and other unqualified persons become public vaccinators.

This is not the language of hyperbole, but the above statements represent the actual condition of the law of South Australia in relation to the medical profession; and, surely, if we have much on which we may congratulate ourselves, it is not encouraging that no honest effort of our own has been able to overcome the amazing solicitude of some of our legislators for unqualified practitioners and quacks.

Gentlemen and honoured colleagues, I have endeavoured to exhibit our School of Medicine and our Hospitals as distinct factors of an advantageous character in our medical life. There yet remains another factor to which, in conclusion, I will briefly allude.

Need I say I speak of the Society over which I have had the honour to preside during the past year. If to be teachers in the School and officers in the Hospital necessarily falls to the lot of a limited number only amongst us, there are no such limitations to the membership of this Society, and I am glad to think there are so many who appreciate the advantages which it offers for meeting together and for the discussion of questions which are mutually interesting and important to us. Further, we may remember that without the generous sympathy and support afforded in the first instance by this Society, that those larger gatherings of the members of our profession, the Inter-colonial Medical Congresses of Australasia might not have been yet inaugurated.

Our meetings cannot fail to be of value, not only as supplying us with that useful stimulus for self-improvement without which our energies are apt to flag, and our mental faculties dulled by the want of a

beneficial mental attrition with one another, but also as affording a much required means of collecting, directing and co-ordinating the scattered efforts of individual members of our profession throughout Australia.

If I may venture to speak a word of unfavourable criticism, it is to express my concurrence with the regrets that have been expressed in this room, that the work done for our Society is almost wholly surgical. Scarcely ever do we have a purely medical paper. The very obvious and brilliant results of surgical procedures are, no doubt, as fascinating to us now as they were in the days of our hospital studentship; but it is nevertheless impossible for us to not admit that the great progress of our profession in the future will be based on lines that fall within the category of the physician rather than of the surgeon. The very idea of a preventive medicine has risen into a conspicuous prominence that was unheard of not long ago. Nearly all those matters relating to the origin and causation of the class of diseases we term infectious, which occupy so much of our thoughts at the present day, come within the scope of the physician rather than the surgeon. And if the star of surgery has been rising rapidly of late years, I have no hesitation in saying that the triumphant marches of our profession in the immediate future will be made by the physician, and will have relation not only to the origin but to the prevention of several of the most fatal scourges of humanity, the results of which will surpass our most sanguine expectations.

To take one only of the infectious diseases as an example of the kind of work which is open to us to do—diphtheria, with which we are so painfully familiar in this colony.

There is, I should say, no country in the world which, unfortunately, offers so great opportunities for working out a solution of the unknown problems as to the conditions under which it arises and spreads. And in such questions it is essentially the country practitioner who can help, as it is he who meets with it in the isolated localities in which diphtheria so often occurs, and whose conditions tend themselves so readily to investigation. But so far as I am aware, the only contributions we have had in the matter of diphtheria have had relation to such questions as to whether or not it is a good thing to perform tracheotomy or not.

Do not consider, gentlemen, that I consider either myself or my surgical brethren free from the same kind of blame. If I am asked the question why hip disease is so common in South Australia, I should have to make precisely the same admission of work unattempted and left undone, and probably of golden opportunities of investigation lost. It all comes to the same thing. We are all of us prone to deal more readily with concrete facts than with abstractions from those facts. We take easily to systems and practices, but we do not take kindly to the investigation of causes and first principles.

The fact that most of us are hard-worked general practitioners is not necessarily an excuse for our neglect, for some of the best professional and highest scientific work has been done in England by men who were in general practice of the poorest, most arduous and most ill-paid description.

In the second place, I think that our means for recording what facts we have at our disposal are not as advantageous as they might be. I believe one of the main objects we should have in view is to endeavour to bring about some kind of amalgamation with the other Australian Medical Societies, so far, at least, as concerns the printing of our reports. The transactions of

the South Australian Medical Society, though there is much of value that has received decent interment in its pages, cannot possibly appeal to a wide range of readers. Nor can we expect, consequently, that they should be taken as a reflex of Australian practice. The same may be said of the publication of any single society in Australia. But it would be quite otherwise with a combined Australian Medical Journal which might be to our colonies something of what the American Journal of Medical Science is, not only to the United States, but to Great Britain. There are many, both here and in the other colonies, who hold such views, and I am sorry that the pressure of work at our recent congresses has caused the consideration of this important question to be set aside. Difficulties, of course, there would be in bringing about such an amalgamation as I speak of, but I believe none of them would be found to be insuperable, and I therefore commend the question to the attention of the next Inter-colonial Congress.

Gentlemen, I have briefly touched upon what I must consider the most important factors in our medical life in South Australia. The hospitals, the school, and our society, all of them being closely related in their effects, and all co-ordinated by the *esprit de corps* which characterises our craft. If what I have said be true, it follows that the welfare of all three should be an object of regard and solicitude, not only to those immediately concerned with them, but to every right-thinking member of the profession in the country.

Change is assuredly not always progress, and the efforts towards progress often involve mistakes. Those, on the other hand, who do not advance for fear of making mistakes, and of being before their time, will probably never advance at all, and I hope I only express the sentiments of a large majority of our profession in thinking that the changes and movements of recent years have, in the aggregate, constituted great steps in advance towards a better comprehension of the duties, the responsibilities, and the science of our calling, and that they have affected, not the few, but the many.

Finally, gentlemen, in vacating this chair, while I am fully conscious of many shortcomings, I believe I may honestly say that I leave my esteemed successor to preside over a society which has been unimpaired in numbers or in vitality during my tenure of office. That fact I attribute mainly to the exertions of those two mainsprings of all similar associations—the Treasurer and Secretary—who, in sparing me, have not spared themselves. To these gentlemen, therefore, my thanks are justly due, and I offer them with all sincerity. To the general body of members I beg to express my grateful thanks for the courtesy with which I observe they never fail to treat the occupant of this chair, and especially do I thank them for the patience with which they have listened to a homely record of our own doings, which, though it contains naught of novelty, may yet serve the humble function of a milestone in the story of the progressive course of our profession in South Australia.

I now call upon Dr. Cleland to take this presidential chair, and wish him all the success which he so well deserves at our hands.

Dr. CLELAND (President elect) took the chair and made appropriate remarks appreciative of Dr. Stirling's address.

Dr. J. DAVIES-THOMAS moved, and Dr. CLINDENING seconded, a vote of thanks to Dr. Stirling for his address.

The motion was carried by acclamation.

Dr. CLELAND announced the result of the scrutiny, and declared Dr. J. A. G. Hamilton Vice-president, Dr. Corbin Hon. Treasurer, and Dr. Poulton Hon. Secretary. Drs. Anstey Giles, Marten, and Stirling were elected new members of Council.

In reply to the two questions—(1.) Do you desire to continue the present arrangement with the *Australasian Medical Gazette*, each member receiving in addition a collected copy of the Yearly Transactions? Or (2.) Are you in favour of reverting to the former method of publishing the Society's proceedings?—thirty-one members replied in the affirmative to question No. 1, and only three members replied in the affirmative to No. 2.

The meeting then adjourned.

#### QUEENSLAND MEDICAL SOCIETY.

GENERAL MEETING held June 11, at 8.30 p.m., in the School of Arts, Brisbane. Present: Drs. Thomson (President), Smith, Gibson, Hill, P. Bancroft, Little, W. S. Byrne, O'Doherty, Tilston, Forbes, Booth and Love.

Dr. QUINNELL, of Brunswick-street, was present as visitor.

Dr. GIBSON shewed a case of congenital dislocation of both lenses into the vitreous chamber.

Dr. LOVE shewed two boys aged 13 and 11 (brothers) in whom the testicles still remained in the abdomen. The father had exhibited a similar peculiarity till the age of 15, when both testicles descended, and he is now the father of five children.

Dr. MARGETTS of Warwick, was elected an honorary member on the motion of Dr. Bancroft, seconded by the President.

R. J. QUINNELL, M.D., Surgeon-Major, of Brunswick-street, was nominated for membership by Drs. Little and W. S. Byrne.

Dr. TILSTON's motion, proposed at last meeting was then put. "Rule 17 to read thus: 'Ordinary members shall consist of any qualified medical practitioners registered in Queensland who shall have resided within (10) ten miles of Brisbane Post Office for a period of six (6) months, or in any other part of the colony for a period of 12 months, who have been nominated at a monthly meeting and elected at a subsequent meeting.'"

Dr. BYRNE moved as an amendment, seconded by Dr. Gibson, "that the question be referred to the revision of By-laws Committee.

The PRESIDENT communicated Mr. Alex. Stewart's letter *re* the Divinity Hall, to the Meeting, whereupon it was decided to remain in the present quarters in the School of Arts. The Secretary was instructed to write to Mr. Stewart.

The PRESIDENT apologised for his unavoidable absence at the last Special Meeting.

Dr. THOMSON then read the notes of an interesting case of tetanus, which had been under his care. (*Vide* page 263).

A fair amount of discussion followed.

Dr. LOVE then demonstrated the action of the Allen Surgical Pump to the Meeting, and shewed some new instruments and preparations forwarded by Messrs. Elliott Bros., for the purpose.



## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castle-reagh Street, Sydney.*

*\* \* Contributors can have their Papers reprinted and published in Pamphlet form, at Cost Price, if the necessary instructions are given to the Publisher at the same time the contributions are sent in.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, JULY 15, 1889.

### EDITORIALS.

#### MEDICAL REGISTRATION IN AUSTRALIA.

THE primary object of all medical and surgical diplomas, and the registration thereof, is that the public may be protected from unskilled and unqualified persons practising—in other words, to prevent quackery. Unfortunately, at the present time, some of the various registering bodies in Australia afford a very fair example of “how not to do it,” to the end that quackery is rampant, and persons possessing inferior or even fraudulent diplomas are let loose to try their ‘prentice-hand on the long-suffering colonial body. The average Colonial is a patient being where his bodily health is concerned, and careless to a degree when he seeks advice in illness. It should, therefore, devolve upon the State to adequately protect him from those unscrupulous charlatans whose advertisements daily appear in almost every colonial paper. It seems an extraordinary anomaly that papers presumably honest in their ordinary business transactions, as the majority of the Australian journals are, should so deaden their sense of right feeling as to be instrumental in fleecing their readers by the publication—and in some cases the laudation of quacks and their advertisements. But, in our opinion—and we have often expressed it—the cause of the rapid growth of quackery is to be found in the acceptance by the various Colonial boards of diplomas of inferior value, and we are convinced that the time has come to raise the standard of diplomas eligible for registration. Yearly the Colonial universities are only granting diplomas to those whose term of study has been two years in excess of that required by the medical

boards of Victoria, New South Wales, New Zealand, and Queensland, to qualify for the registration of a diploma. Moreover, Australian degrees are obtained at a far greater cost both of money and brain-work than many foreign, more especially American, ones; and it cannot fail to strike the colonial mind that some little protection should be given to their own offspring, and that foreigners should not flourish at the expense of native-born Australians. The term of study fixed at three years for the obtaining of a diploma is, as we have frequently expressed it, utterly insufficient, and a minimum of four years is absolutely necessary to acquire that knowledge which, in these days, is requisite to a proper practice of our profession. It would be, therefore, a step in the right direction were the colonies, above-named, to raise their standard one year, and they might follow South Australia, by requiring, in addition, that any foreign diploma must be such as would enable its holder to fill a Government medical appointment in the country in which it was granted. Western Australia and Fiji being crown colonies naturally come under the Imperial law, and Tasmania has stuck to very much the same lines, with the exception that “Letters Testimonial” are granted to the holders of foreign diplomas *after an examination* held by the Tasmanian Board of Medical Examiners. In all the colonies except New Zealand, personal attendance before the Medical Board is a *sine qua non* for registration, which is, to say the least of it, an irksome burden to practitioners who may be registered in Victoria, South Australia, or Queensland, and who may cross the borders of New South Wales to attend a case, or *vice versa*. It is unfair to those, who, living in border towns, may have their practice scattered over the three colonies, as in Wentworth, and would entail on them the necessity to spend time and money in visiting Melbourne, Adelaide and Sydney, registration in the two forms being necessary in order to obtain the necessary right to sue for the services they render in the colonies of which they are the capital. Surely this case would be met by giving power to police magistrates to enquire into the status of a medical man registered in any one of the colonies, wishing to practice in a particular district in another, and if satisfied that he is the person he represents himself to be and is legally qualified, report him to the Medical Board of his colony as entitled to registration.

We cannot refrain from here expressing most strongly our conviction that registration in any one colony should suffice for the whole of Australia, and that the sooner federation in this respect takes place, the better for all concerned. It is absurd that each colony should, by varying



slightly the terms of their Registration Acts, place obstacles in the way of legally qualified men exercising their profession in the colonies generally, since by so doing they place them on a footing with quacks, to the benefit of the latter; for neither being registered, they are legally equal, with the advantage to the quack, who will be less scrupulous in his dealings. To sum up, the situation seems to call for an increased standard as to eligible diplomas for registration, combined with federation, and that this would benefit all is as self-evident as it is unanswerable.

### MURDER MADE EASY.

To a casual observer a neatly conceived and cleverly executed murder may present few, if any, attractions; but to the student of social problems it has a fascination which only those who have studied such problems can properly appreciate. As a field for experiment and for the exercise of his profession, Australia far surpasses any other country for the average everyday murderer. There is some reason to believe that South America, notably Lima, also Whitechapel, may vie with the Australian Colonies where science is required, but we possess an advantage in one respect not attained to by these places, that is, here anyone can do a decently interesting murder no matter how little scientific training he may have acquired.

The only essentials wanted here for the successful commission of homicide are determination and self-reliance, the laws of the colonies provide every other requisite, and to the would-be murderer we would strongly commend Australia as a future *habitat* for action.

The selection of the method to be employed is, of course, a matter for more or less mature consideration, and the place of action may also require some slight reflection. A few hints, therefore, may be acceptable to those of our readers who desire to investigate the subject more thoroughly. As regards the methods used, they naturally vary with the age and sex of the subject, children may be overfed or poisoned with calomel or some soporific such as opium; one case the writer recalls in which two pounds of undigested sago was found in the stomach of an infant (illegitimate) five days old; in another (also illegitimate) 20 grains of calomel were given to a baby not twenty-four hours in the world, in both the result was satisfactory to the parent and to the coroner (save the mark) and not even a word of remonstrance was uttered. It seems, therefore, that little or no precaution to avoid detection need be taken in the case of children, except, possibly to secure the services of a fitting coroner or magistrate to hold an

inquiry, and even this may be dispensed with in country districts, where all that is needful is to report the death to a police sergeant. Perhaps the murder of adults requires some little more care in dealing with, and it is almost essential to lure your subject into a country district; this done, the rest is simply a matter of choice to the investigator, a hammer, knife, or better still, poison, will do the remainder. We personally would recommend poison as there are few laymen in the whole of Australia who know much about them, and at least one government analyst is of opinion that the tests for Quinine and Aconitia are identical.

A hammer judiciously applied to the head, in the bush, may easily be mistaken for a fall from a horse; a knife carefully inserted into the nape of the neck, will leave a wound which no policeman would discover, and the body will be buried without further trouble. We could dilate on various methods, but space compels only a few words by way of conclusion. Life in Australia instead of being as it should be, at a premium, is at a discount. It never seems to have struck any of the various colonial legislatures that murder was a thing to be discountenanced, and intelligently conducted magisterial inquiries or coroners' inquests are the exception much to the advancement of scientific pursuits in the way of murder. Coroners, with the requisite qualifications, are few and far between, their functions being often exercised by justices of the peace, whose knowledge is little, but importance great, and who promptly sit upon anybody, living or dead, who presumes to contradict their previously formed opinion of the case. Be it murder! what care they for murder; it is accidental; and the verdict, if it can be so-called, is to that effect. Professional opinions! What of them; blatant ignorance is worth a dozen doctors; it is great, powerful, and long will it prevail. Murder! Why the thing is absurd. Accident, my dear sir, accident, I tell you. The doctor? Oh! he's a fool, always crying wolf. *I*—the great *I*—who am a J.P., with a very large J., tell you so, and it suffices. And so wags the world, so die scores unregretted, uncared for, possibly, also undeserving—but that matters not. There is but one moral to be drawn from this. If we wish to preserve life let us insist on inquiry by officials who shall have power to demand thorough and competent inquiry into every case of death not certified to by a medical man, let us abrogate the powers of the average honorary J.P.'s; and, lastly, let us be able to say that we have in Australia murder made hard, and not murder made easy, for the latter does not sound well, and may be a reproach to us in the aftermath.

## ADVERTISEMENT OF AN L.R.C.P. AND L.R.C.S., EDIN.

WE re-publish for the criticism of his professional brethren, and the authorities of the colleges of which he is a licentiate, the subjoined advertisement, which appeared in a recent issue of *The Press*, a newspaper published in Christchurch, New Zealand:—

D <sup>R</sup> .	M <sup>AC</sup> B <sup>EAN</sup>	S <sup>TEWART'S</sup>
NEW	NEW CURE	CURE
NEW	FOR ASTHMA, CONSUMPTION	CURE
NEW	Bronchitis, Catarrh, Whooping Cough, Quinsy, Croup,	CURE
NEW	Winter Cough, Influenza, Hay Fever, ordinary Colds, also a	CURE
NEW	Specific for Diphtheria and Typhoid Fever.	CURE
NEW	—	CURE
NEW	From Mr. J. Baxter, Chemist, Christchurch.—Your Asthma Cure has been very successful in cases of spasmodic asthma, in each case being recommended by their medical atten- dant. Its utility in Diphtheria is established.	CURE
NEW	From Mr. Argles Bishop, Chemist, Sydenham.—I know that your New Cure has been used with splendid re- sults in Typhoid Fever.	CURE

### TO BE HAD OF ALL CHEMISTS.

On the face of it we would fain believe that this delectable production has been inserted by some unscrupulous chemist and not by the practitioner himself. Independently of the absurdity of advertising the asserted remedy as being equally good for such varying diseases, the fact of keeping its composition as a secret is so contrary to all professional tradition and custom as to be deserving of the strongest condemnation. It has been the pride and glory of medicine that no one of its legitimate members has ever endeavoured to keep as a secret, for the purpose of creating a monopoly for his personal aggrandizement, any discovery which he has made which would be a means of relieving suffering humanity, and this has been one of the great distinctions between the orthodox and properly trained medical practitioner and the quack. As an example of how universal and lasting has been this rule, we can but quote the discovery of the obstetric forceps by the Chamberlains, and their concealment of their mode of application for three

generations. Though the intellectual ability of the discoverer is freely admitted, the very name has always been held in just contempt as that of men who, for mere money-seeking purposes, were willing to allow women to die and suffer unrelieved rather than give to their professional brethren a knowledge of their secret. We feel that, in quoting the Chamberlains in juxtaposition to "Francis MacBean Stewart, L.R.C.P. & L.R.C.S., Edinburgh, 1864," we are bestowing unmerited distinction on the latter, who, much to our surprise, we find is on the staff of the Christchurch Hospital as a visiting surgeon.

As a consequence of a vote of want of confidence in the Ministry of which the Hon. Thomas Playford, M.P., was Premier, moved by Dr. Cockburn, member for Mount Barker, in the Legislative Assembly of South Australia being carried, he was sent for by his Excellency Lord Kintore and entrusted with the formation of a new Ministry. This political news is of interest to our professional readers, as the Honorable John Alexander Cockburn, M.P., is an M.D., London, 1874, and M.R.C.S., England, 1871. He formerly practised at Jamestown, South Australia, but on his election to Parliament he removed to Adelaide. Included in his Ministry is another medical practitioner, the Honorable Allan Campbell, M.L.C., who is a member of the Executive Council without a portfolio. We heartily congratulate our professional brother, Dr. Cockburn, on his victory.

## LETTERS TO THE EDITOR.

### MEDICAL ETIQUETTE IN THE AUCKLAND HOSPITAL.

(To the Editor of the A. M. Gazette).

SIR,—I have noticed in the *Australasian Medical Gazette* the correspondence between a Dr. Bakewell and myself (taken from the *Herald* of Auckland), with comments. Kindly allow me to explain fully.

Dr. Bakewell is an Auckland practitioner. I enclose his advertisement. He, like other medical men, sends cases to the hospital and visits them occasionally afterwards. Now, sir, to visit a patient under the care of another medical man is a delicate matter, requiring much discretion. If the visiting practitioner tells the nurse in charge that certain things ordered ought not to be done, if he comments to her on the treatment adopted, if he (worst of all) leads the patient to believe his doctor does not understand his case, and tells him that he is not being properly treated, is that professional conduct? Once or twice had Dr. Bakewell been guilty of such ungentlemanly proceedings.

It is scarcely necessary to say that Dr. Bakewell's diagnosis in the case mentioned above—where he spoke to the patient—was not correct. The man was suffering from large renal calculus, weighing 1½ lbs., as the *post-mortem* showed. He was sent in for stone in the bladder; the bladder, however, was empty. The correspondence you publish arose out of Dr. Bakewell's coming up to the hospital on a visiting day, when everyone is very busy, bothering and bullying a nurse, who was exceedingly busy dressing a just-admitted badly-burnt fireman. Dr. Bakewell did not make himself known to the nurse, and she, naturally and rightly, was reticent as to the treatment adopted in certain cases, and he finally reported her to the Lady Superintendent. Dr. Bakewell never asked to see any resident doctor. When the nurse reported the matter to me I was naturally angry, and this, combined with the memory of former ills, brought forth a, perhaps, hasty letter. But it was absolutely necessary to stop Dr. Bakewell's unprofessional practices in the hospital at least.

I need scarcely say my letter was not meant for publication. Dr. Bakewell, of course, did not ask my permission. The whole matter was brought before the Hospital Board and the honorary staff, but it was not, I thought, right or expedient to carry the matter any further in the public Press. Besides, Dr. Bakewell is an elderly man, in bad health. I am, however, glad of this opportunity of explaining things in a medical journal such as the *Australasian Medical Gazette*.

I am, Sir, &c.,

THOS. W. BELL, M.B., CH. M. (EDIN.), 1884,  
Resident Medical Officer.

Auckland Hospital, May 25.

P.S.—I may state that Dr. Bakewell has always had fullest possible information whenever he made enquiries from any of the resident medical officers.—T.W.B.

#### DRUMINE.

To the Editor of the A. M. Gazette.

SIR,—It may interest your readers to learn that DR. THEODORE SCHUCHARDT, of Görlitz, Germany, has isolated, from *E. Drummondii*, Drumine, Drumic acid, and a bitter principle. Drumine, as prepared by him, is exhibited at Messrs. Ford and Co.'s, Swanston-street, Melbourne, and *does credit* to the manufacturer. Accept my thanks for the kindly way in which you have ever treated my contributions on the subject, when, with a general sneer, you were very much tempted to follow suit. Please note that I believe the colouring matter is more accurately described as "Saffron Yellow" than "Orange."

Yours faithfully,

Melbourne, June 12, 1889.

JOHN REID.

#### MEDICAL SOCIETY OF VICTORIA.

THE monthly meeting of the Medical Society of Victoria was held on July 3, under the presidency of Dr. Balls-Headley. About 25 members and visitors were present. Dr. Graham, of Richmond, was unanimously elected an honorary member of the society in recognition of the many services he had rendered it. Dr. Craig, of the Eye and Ear Hospital, and Dr. Lawrence, of Malvern, were elected ordinary members. Dr. Balls-Headley read a paper on the subject of acute peritonitis in women, and Drs. J. P. Ryan and Barrett exhibited some ophthalmic cases.

#### THE MONTH.

##### NEW SOUTH WALES.

THE HON. DR. H. N. MACLAURIN, M.L.C., of Sydney, now in London, and Sir Saul Samuel, Agent-General for New South Wales, are seeking to arrange for medical reciprocity between New South Wales and Great Britain.

THE Government have decided to complete the Sydney hospital buildings in Macquarie-street in accordance with the original plans.

THE Children's Hospital at Petersham, near Sydney, under the management of the Roman Catholic Nursing Sisters, was opened by Cardinal Moran on June 9.

THE Directors of the Prince Alfred Hospital, Sydney, have decided that medical and surgical tutors, whilst holding office, shall not be members of the honorary staff of the institution, but that this resolution shall not apply to Dr. Jenkins, the present medical tutor.

A PRISONER in the Parramatta Gaol has passed a tapeworm measuring 80ft. 4in. The man had exhibited signs of insanity, but since the occurrence he is apparently all right.

THE death is announced of Mr. Patrick McDonagh, L.R.C.S. Irel. 1857, L.A.H. Dub. 1854, one of the oldest practitioners in Sydney, who died at his residence, Macquarie-street, on June 24, aged 63 years. He was born in county Fermanagh, Ireland, on November 13, 1826, and after being admitted into the ranks of the medical practitioners, he settled for a time at Cape Town, and afterwards proceeded to Melbourne. After a short residence in that city Dr. McDonagh, in 1861, came on to Sydney, where he has resided ever since. He was long connected with the Sydney Hospital as District Surgeon, and was Permanent Staff Surgeon to the Volunteer Artillery forces of the colony. His remains were interred with military honours on June 27.

SIR ALFRED ROBERTS, Dr. James Graham, and Dr. R. Scot-Skirving, are going to present busts of eminent medical men to the Sydney University, to be placed in the corridor of the new medical building.

WE learn that Dr. George Goode, of Orange, against whom a verdict for £100 was given at the Circuit Court, Bathurst, in April last, in the case *Davis v. Goode*, has applied for a new trial. The appeal will most likely come on for argument early next Term.

THE services of a medical man are required at Rylstone on the Cudgong River, in an agricultural and pastoral district, 156 miles by rail west of Sydney; the population of the township is about 400, and of the district 3,500; the probable income is £450 a year. Dr. Bateman, who practised there for some years past, has left the district.

DR. J. B. CRABBE, late of the Clarence River, has commenced practice at Sydney-st., North Willoughby, near Sydney.

DR. W. FINLAY has removed from Bathurst to Fernmount, on the Bellinger River.

DR. J. FOORD-HUGHES has settled at Granville, a suburb 12 miles W. of Sydney.

DR. H. P. C. GORRICK, late of Waverley, and formerly of Tamworth, has settled at Hillgrove, a rising mining township 20 miles from Armidale.

DR. C. F. HARKIN has removed from Wodonga (Vic.) to Albury.

DR. WM. HARVEY has commenced practice at Loyalty Buildings, Enmore-road, Newtown, a suburb adjoining Sydney.

DR. S. T. KNAGGS, of Sydney, surgeon in the Naval Brigade, has been promoted to the position of Staff Surgeon.

DR. J. L. NEWTON has removed from Denman to Richmond, 38 miles N.W. of Sydney.

DR. O. A. PATRICK has succeeded to the practice of Dr. Turner at Marrickville.

DR. C. ROOKE of Germanton, has been appointed member of the local Licensing Court.

DR. C. SWANSTON, on his leaving the Mudgee District, was presented by the members of the A.H.C. Guild, with an illuminated address, which referred in complimentary terms to his long connection with their lodge. In addition, three banquets were given to Dr. Swanston by leading residents of the district.

DR. H. J. TARRANT returned to Sydney from his trip to England by the R.M.S. "Iberia."

MR. DAVID THOMAS has commenced practice at Kogarah, near Sydney.

#### NEW ZEALAND.

A RUFFIANLY assault was committed between twelve and one o'clock on Friday morning, the 24th of May at Napier, on the Shakespere-road, by six men, on Dr. T. C. Moore, who was much illused, and only saved himself from serious injury by rushing into his residence.

DR. W. T. DERMER, a graduate of the University of New Zealand, has commenced practice at Carterton, 51 miles N.E. of Wellington.

DR. W. E. HACON, of Christchurch, has been elected President of the Canterbury Branch of the New Zealand Medical Association.

DR. O'CARROLL, of New Plymouth, has resigned his appointment of honorary surgeon of the Taranaki Rifle Volunteers.

DR. JAS. YOUNG has resigned his appointment of honorary surgeon of the Riverton Rifle Volunteers.

#### QUEENSLAND.

A NEW asylum for the insane (the third in Queensland), will be opened at Toowoomba about the first of August next.

THE whole of the leper buildings at North Shore, Cooktown, have been burned, though it was at first intended to sell the iron roofs.

A SURGEON—registered by the Queensland Medical Board—is required for the Hospital at Winton, in North Queensland; salary, £350 per annum; private practice allowed. Applications must be in the hands of the Secretary, Mr. W. S. Schollick, not later than the 27th July.

MR. JOHN TRAHERNE WILLIAMS, M.R.C.S. Eng., L. et L. Mid. R.C.P. Ed., 1884, who practised at Ayr, in Northern Queensland, for the last fifteen months, is dead.

DR. W. M. KING has removed from Port Douglas to Ayr, on the Lower Burdekin, 800 miles N. W. of Brisbane.

DR. M. MAGILL has been elected Medical Officer of the Goondiwindi Hospital by sixty-two votes. The other candidate, Dr. Clayworth, received eighteen votes.

DR. P. H. S. MELLISH, has commenced practice at Kelvin Grove, Brisbane.

SURGEON-MAJOR Dr. John Thomson, of Brisbane, has been promoted to be Brigade-Surgeon to the Defence Force.

#### SOUTH AUSTRALIA.

THE Playford Ministry having resigned, consequent on the passing of the no-confidence motion, Dr. J. A. Cockburn, of North Adelaide, has undertaken to form a new administration; Dr. Cockburn holds the positions of Chief-Secretary and Premier in the new Government. The Hon. Dr. Campbell, M.L.C., has also been included in the new ministry as a member of the Executive Council without a portfolio.

SIR ARTHUR BLYTH, Agent-General for South Australia, has received 230 applications for the position of Medical Superintendent of the Adelaide Hospital.

THERE is an opening for a medical man, used to long rides, at Tibooburra, in the north of the Colony. There are two chemists in the township, but no legally qualified medical practitioner within a radius of 200 miles. A bonus would probably be given to a suitable gentleman.

DR. J. R. PALMER has removed from Petersburg to Port Lincoln, a seaport on the shores of Spencer's Gulf, 200 miles W. of Adelaide.

#### VICTORIA.

A DEPUTATION representing the medical profession waited on the Premier on June 26, who promised to consider the advisability of introducing a Bill dealing with quackery; also to take steps to remove the names of medical men from the register on account of any misconduct.

THE Council of the Melbourne University have appointed the following examiners for the ensuing year:—Physiology, Physiological Chemistry and Histology—Professor Halford and Dr. J. W. Barrett. Descriptive and Surgical Anatomy—Professor Allen and Mr. F. D. Bird. Pathology—Professor Allen and Dr. Moore. Materia Medica, Therapeutics and Medical Botany—Dr. Grant and Dr. Bennie. Therapeutics, Dietetics and Hygiene—Dr. Springthorpe and Dr. Snowball. Obstetric Medicine and Diseases of Women and Children—Dr. Balls-Headley and Dr. Rowan. Theory and Practice of Medicine—Dr. Jamieson and Dr. Williams. Forensic Medicine and Psychological Medicine—Dr. Neild and Dr. Graham. Surgery—Mr. Girdlestone and Mr. C. S. Ryan.

THE Committee of the Melbourne Women's Hospital have adopted a report submitted by Dr. Felix Meyer, of the honorary medical staff, recommending that the term of duty for each honorary medical officer should be altered from a fortnight to four weeks, and that during his term of duty each honorary medical officer should deliver a lecture once a week to the students, such lecture to be open to all students attending obstetric lectures at the University. The nurses also should have regular instruction from the honorary medical staff.

DR. HUGO AUGUST HERMANN SCHIEL, M.D., Kiel, 1883, late of Cheltenham, and formerly of Beaconsfield and Minyip, died at Rutherglen on July 2, aged 34. He was formerly resident medical officer of University Hospital, Kiel, and of the Lunatic Asylum, Wehnen, in Oldenburg. The deceased gentleman arrived in the colony early in 1884.

DR. J. F. BARTLEY, late of the Bendigo District Hospital, has settled at Tungamah, 149 miles North of Melbourne.

DR. A. J. R. LEWELLIN, resident Medical Superintendent of the Melbourne Hospital, has resigned his position.

DR. W. H. STOCK has removed from Clifton Hill to Surrey Hills, about 8 miles from Melbourne.

DR. C. DE W. HEARD has settled at Murchison, on the Goulburn river, 92 miles North of Melbourne.

DR. C. H. HILL, Junior Medical Officer of the hospitals for the Insane, has resigned his position.

DR. R. W. LETHERIDGE, late of Mansfield, has been appointed a Junior Deputy Medical Superintendent of Hospitals for the Insane in Victoria.

DR. J. MCCONNOCHIE, late of Seymour, and formerly of Ballarat, has commenced practice at 22 Nicholson-street, Fitzroy, a suburban city adjoining Melbourne.

DR. A. M. MACFARLANE, late House Surgeon of the Wangaratta Hospital, has commenced practice at No. 7 Rushall-crescent, Clifton Hill, near Melbourne.

DR. JOHN S. MERRILLEES and Dr. JAMES F. MERRILLEES have commenced practice at Burwood road, Auburn, near Melbourne.

DR. L. F. PRAAGST, late Resident Surgeon of the Melbourne Hospital, and Melbourne Women's Hospital, has commenced practice at 3 Hillside-terrace, Hoddle-street, East Melbourne.

DR. HENRY WHEELER has commenced practice as a Homoeopathic Physician at Hawthorn, and at Collins-street, Melbourne.

#### MEDICAL APPOINTMENTS.

Clayton, William Mayne, L.R.C.S. Irel., L.K.Q.C.P. Irel., elected Resident Medical Officer to the Midwifery Department of the Melbourne Women's Hospital.

Daly, Uluk Arthur, M.B. & Ch. B. Dub., to be Health Officer for the shire of Gisborne, Vic.

Dalsell, Isaac William, L.R.C.P. & R.C.S. Edin., to be Public Vaccinator for the district of Lamaden, N.Z.

DeBened, Arthur Castriot, M.R.C.S. Eng., to be an additional Public Vaccinator for the district of Christchurch, N.Z.

King, William Moore, M.R.C.S.E., to be Government Medical Officer at Ayr, Qu.

L'Estrange, Guy Stuart, L.R.C.S. Irel., L.K.Q.C.P. Irel., to be Government Medical Officer at Roma, Qu.

Masey, Harry Massey, L.R.C.P. Lond., M.R.C.S.E., to be Public Vaccinator for Mount Wycheproof, Vic., vice Dr. H. Stoker resigned.

Morris, George Alexander, M.B. & Ch.M. Glas., to be Public Vaccinator for the district of Mataura, N.Z.

Skinner, David, M.B. & Ch. M. Aberd., to be Health Officer for shire of Beechworth, Vic., vice A. H. Parker, L.R.C.P., resigned.

Turner, Alfred Jefferies, M.D. Lond., M.R.C.S.E., appointed Resident Medical Officer at the Sick Children's Hospital, Brisbane.

Whitaker, Joseph, M.D. Qu. Univ. Irel., L.R.C.S. Irel., to be Public Vaccinator for North Melbourne, vice Dr. G. Moore, resigned.

MR. BRUCK has received a supply of the new TAR NIGHT-LAMP for the treatment of all affections of the respiratory organs, as well as croup and diphtheria, also useful for the disinfection of sick-rooms; price of the apparatus complete, including a supply of Norwegian tar, camphor and night-lights, 6s.

ABOUT the end of July, Mr. Bruck will receive a magnificent assortment of the latest English and American medical works, a list of some of which will be found in this issue.

CITY PRACTICE—Residence eminently suited for above, overlooking Hyde Park, containing eight rooms, kitchen, bath-room, cellars, balcony, side entrance and every convenience; and having undergone extensive alterations and repairs is now ready for occupancy. For terms &c., apply

LLOYD'S AGENCY, 244 Pitt-st., Sydney.

#### PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners, by the respective Boards:—

##### NEW SOUTH WALES.

Jones, Shadrach Edward Robert, M.D. St. Andrews 1842; L.S.A. Lond. 1844; M.R.C.S. Eng. 1843.

Harkin, Charles Fitzmaurice, M.B. Univ. Dub. 1888; Ch. B. Univ. Dub. 1888; B.A. O. Univ. Dub. 1888.

Sutherland, John, L.R.C.P. Edin. 1885; L.R.C.S. Edin. 1885; L.F.P.S. Glasg. 1885.

##### NEW ZEALAND.

Dermer, William Thomas, M.B., Univ. N.Z. 1889.

##### QUEENSLAND.

Barker, John, M.B. 1886, M.D. 1887, Dub.; M.R.C.S. Eng. 1886 L.S.A. Lond. 1886.

Cheyne, Robert, L.R.C.P. Edin. 1883; L.S.A. Lond. 1881.

Hugston, Robert Wilson, M.B. & Ch. B. Melb. 1889.

##### VICTORIA.

Macnutt, George Augustus, M.R.C.S. Eng. 1881; L. & L. Mid R.C.P. Edin. 1882; M.D. Brussels 1884.

Atkins, George Purcell, L.A.H. Dub. 1869; L.R.C.P. & R.O.S. Edin. 1878; L. & L. Mid. 1883, Dip. State Med. 1883, K.Q.C.P. Irel.

Quirk, Thomas Augustus, M.R.C.S. Eng. 1888; L.R.C.P. Lond. 1888.

Lawrence, Herman Fermor, L. & L. Mid. R.C.P. & R.C.S. Edin. 1888; L.F.P.S. Glasg. 1888.

O'Farrell, Denis Paul, L.R.C.S. Irel. 1874; L.K.Q.C. Irel. 1874.

Additional qualifications registered:—

Hill, Charles H., Ch. B. Melb. 1889.

Colquhoun, Arthur G.H., Ch. B. Melb. 1888.

Seal, Charles, Ch. B. Melb. 1888.

Deane, John E. J., L. Mid. F.P.S. Glas. 1887.

#### BIRTHS AND MARRIAGES.

\* \* The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcement.

##### BIRTHS.

BENNIE.—On the 25th June, at 123 Collins-street East, Melbourne the wife of Peter Bruce Bennie, M.D., of a son.

CLOWES.—On the 1st July, at Albion, the wife of Dr. Clowes, of a daughter.

RADIE.—On the 9th June, at Caulfield, near Melbourne, the wife of James Radie, M.B., of a daughter.

NEWMARCH.—July 2, at North Shore, Sydney, the wife of Dr. B. J. Newmarch, of a daughter.

NORRIE.—July 1, at 3 Hyde Park-terrace, Sydney, the wife of Andrew Norrie, M.D., of a daughter.

ROGERS.—On the 17th June, at Port Wakefield, S.A., the wife of R. S. Rogers, B.A., M.B., &c., of a daughter.

##### MARRIAGES.

BOLLEN-BALLANTYNE.—On the 14th June, by the Rev. Roby Fletcher, M.A., Christopher Bollen, M.D. Port Adelaide, to Helen Ballantyne, daughter of James Ballantyne, North Unley, S.A.

DOUGLAS-SMITH.—July 1, at St. Philip's Church, Sydney, Alfred William Douglas, L.R.C.P., L.R.C.S. Ed., &c., of Brushgrove, N. S. Wales, to Harriette, younger daughter of the late Robert Holmes Smith, solicitor, Waterford, Ireland.

NORRIS-FOULKES.—On the 23rd May, by the Rev. Thomas Adamson, William Perrin Norris, M.B., B.S., of Wood's Point, Vic., to Mary (Polly) Foulkes, eldest daughter of the late John Foulkes, North Carlton, Melbourne.

WILLIAMS-CROOKE.—On the 22nd May, at St. Andrew's Manse, Carlton, Melbourne, Dr. E. H. Williams, of Fitzroy, to Georgina L. Crooke, widow of the late Dr. Tas. Crooke.

#### TO THE MEDICAL PROFESSION.

A GENTLEMAN holding a good position in Sydney desires for himself and wife (no children) to arrange with a Doctor to share a house in town. Would be willing to provide assistance to look after the Doctor's Patients and Consulting Rooms. Apply, "ENGLISH," care of Mr. BRUCK, 13 Castlereagh-street, Sydney.

## REPORTED MORTALITY FOR THE MONTH OF MAY, 1889.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
N. S. WALES.														
Sydney .....	132,846	304	175	76	...	2	5	2	3	11	12	7	4	1
Suburbs .....	215,849	877	400	219	..	4	24	4	17	23	38	13	6	4
NEW ZEALAND.														
Auckland .....	35,858	81	33	14	...	...	1	...	...	3	7	1	2	...
Christchurch .....	16,455	38	10	4	...	...	2	...	1	1	1	2	...	...
Dunedin .....	23,546	53	15	4	...	...	...	...	...	...	...	1	3	...
Wellington .....	29,075	82	20	9	...	...	...	...	3	...	...	2	1	1
QUEENSLAND.														
Brisbane .....	51,689	209	80	39	} ...	...	4	...	6	13	8	5	1	1
Suburbs .....	21,960	167	35	25										
SOUTH AUSTRALIA .....	312,813	...	...	...	...	...	...	...	...	...	...	...	...	...
Adelaide .....	43,750	...	...	...	...	...	...	...	...	...	...	...	...	...
TASMANIA.														
Hobart .....	34,745	94	43	4	...	...	...	...	6	1	1	3	3	1
Launceston .....	21,352	68	33	9	...	...	5	...	4	...	...	3	...	...
Country Districts.....	91,428	218	79	...	...	...	5	...	3	4	...	...	...	...
VICTORIA.														
Melbourne .....	75,400	147	121	} 279	...	1	51	14	92	19	79	44	34	4
Suburbs .....	362,385	1366	733											

## METEOROLOGICAL OBSERVATIONS FOR MAY, 1889.

STATIONS.	THERMOMETER.					Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.			Depth.	Days.		
							Inches			
Adelaide—Lat. 34° 55' 33" S. ; Long. 138° 36' E. ....	...	...	...	...	...	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S. ; Long. 174° 49' 2" E. ....	124.	68.	56.8	42.5	...	...	5.410	17	74	...
Brisbane—Lat. 27° 28' 3" S. ; Long. 153° 16' 15" E. ....	134.	82.8	65.7	53.	30.129	...	3.346	17	78	S.
Christchurch—Lat. 43° 32' 16" S. ; Long. 172° 38' 59" E. ....	123.	75.	49.	30.8	...	...	1.366	7	73	...
Dunedin—Lat. 45° 52' 11" S. ; Long. 170° 31' 11" E. ....	110.	67.	48.1	34.	...	...	.904	13	79	...
Hobart—Lat. 42° 53' 32" S. ; Long. 147° 22' 20" E. ....	...	72.	52.6	36.2	30.100	...	0.96	15	80	...
Launceston—Lat. 41° 30' S. ; Long. 147° 14' E. ....	...	66.2	52.4	31.	30.164	...	2.51	9	83	...
Melbourne—Lat. 37° 49' 54" S. ; Long. 144° 58' 42" E. ....	...	78.1	55.6	39.4	30.082	...	0.94	11	...	...
Sydney—Lat. 33° 51' 41" S. ; Long. 151° 11' 49" E. ....	...	75.8	61.1	49.4	30.148	...	20.87	17	80	W.
Wellington—Lat. 41° 16' 25" S. ; Long. 174° 47' 25" E. ....	135.	67.	52.9	36.	...	...	.921	13	76	...

# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### DR. A. FEOKTISTOW'S EXPERIMENTAL RESEARCHES ON SNAKE POISON.

BY A. MUELLER, M.D., OF YACKANDANDAH, VICTORIA.

It will no doubt be interesting to those who have read my papers on the pathology and cure of snakebite lately published in this journal, to compare my theory of the action of snake poison with the most recent scientific researches in Europe on this subject. As Dr. Feoktistow's work (*Experimentelle Untersuchungen über Schlangengift*, St. Petersburg, 1888) is not accessible to the majority of the readers of the *Gazette*, I have undertaken the task of presenting them with a short abstract of it.

His experiments, 400 in number, were made with the poison of *Vipera ammodytes*, *Vipera berus* and *Crotalus durissus* in Prof. Kobert's laboratory at the University of Dorpat, in that of Prof. Owsjannikow at the Imperial Academy of Sciences, St. Petersburg, and in the private laboratory of the author. All the resources which science and wealth can supply were thus at his command. The snakes (about 200) were kept in hot-houses (so called terraria) at a uniform temperature, and throughout the experiments a strictly scientific method was maintained. Unlike most previous inquirers selecting a few domestic animals as subjects of experiment, and pouring the *materia medica* promiscuously into them when under the effect of the poison, Dr. Feoktistow chose for his subjects specimens of nearly every class of the animal kingdom, from the monad up to the higher vertebrates and, instead of empirically searching for an antidote, made the principle of action and the organs on which the poison concentrates its fatal action, the first and principal objects of his search.

To follow the author through his most interesting experiments and explain the methods employed, unfortunately, space forbids, and I must therefore confine myself to a merely cursory review of the principal results obtained.

Only the lowest forms of animal life enjoy immunity from snake poison, but it ends with the molluscs; 0.1 c.c. of a 2 per cent. solution injected into the heart of *Anodonta cygnea* (duck shell) caused an immediate arrest of pulsation. Crustacea also were quickly affected, one-half c.c. of the same solution injected under the shell at

the tail end of a crayfish produced paralysis of the heart and of the whole muscular system, and the same effect, together with asphyctic respiration, was observed in fish. Frogs showed first paresis of the hind legs, and then general motor paralysis with arrest of respiration and circulation. In mammals the symptoms were almost uniformly observed which the poison of the viperina produces in man, locally extravasations of serum and blood into cellular and muscular tissues, generally dyspnoea, paresis and paralysis of hind legs, followed by general paralysis, occasionally ushered in by tonic and clonic convulsions and accompanied by blood-stained discharges or hæmorrhages from bowels, lungs, nose, and bladder, finally death by asphyxia and simultaneous heart paralysis. Passing from these general effects the author traces the special ones on special organs and their function as follows:—

**Action on nerve centres.**—Paralysis of central origin, motor reflex action sometimes increased at first, lost with advent of paralysis. The latter, commencing in the lowest part of spinal cord, ascends, involving centre after centre. *With regard to the effect of strychnine it was found that frogs resisted the effects of the drug when under the influence of the snake poison, and that the latter arrested within five minutes tetanic convulsions primarily produced by it.* From the fact of barium chloride not causing convulsions in snake-poisoned animals as it does in healthy ones the author conjectures that snake poison also paralyses the gray substance covering the hemispheres, of which barium chloride is an irritant poison.

**Action on peripheral nerves.**—The motor sphere not affected, faradisation of nerves of paralysed extremities producing corresponding muscular contraction. (Difference between curare and snake poison). With regard to sensory sphere, experiments not conclusive, sensation lost with advent of paralysis.

**Action on muscles.**—Induction currents producing contraction—snake poison not a muscle poison.

**Action on pupil.**—Invariably paralysis—excessive dilation with complete insensibility to light.

**Action on the heart.**—Paralysis, preceded by a short period of irritation and simultaneous with paralysis of respiratory centres. By a series of most ingenious experiments the author proves that it proceeds both from central and local centres, those of the vagi and the intracardial motor ganglia, and that the heart action stops in diastole or semi-diastole.

*Action on blood pressure.*—On this point experiments are also most interesting and ingenious. The author traces the immense and sudden fall to paralysis of the N.N. splanchnici, besides, of course, the reduced heart action and general vaso-motor paralysis. The N.N. splanchnici regulating and controlling the portal circulation, the blood rushes into the relaxed abdominal vessels, causing immense engorgement and draining the rest of the body. Of drugs raising the blood pressure in snakebite the ammonia was found most effective, and the beneficial effects of it in light cases of poisoning are thus explained, but in severe ones it is apt to increase the hæmorrhagic process. Transfusion raised the blood pressure only as long as it lasted, the blood immediately after it rushing into the abdomen, and the pressure sinking as low as before. In one of these experiments the author, whilst injecting defibrinated blood into the external jugular vein, allowed a corresponding quantity to flow out of the crural artery until five times as much as the natural blood mass of the animal had passed through it, and not a drop of the original blood could have been left. The result was nil, neither the blood pressure being permanently raised, nor the general poisoning symptoms changed.

*Action on respiration.*—Invariably dyspnoea asphyxia, and finally complete paralysis of respiratory nerve centres. Very large doses of the poison simultaneously paralyse respiration, heart, and vaso-motors, and the blood pressure at once sinks to 0.

*Action on blood.*—In a 2 per cent. solution of the poison the stroma of the corpuscles is dissolved and the hæmaglobin separated from them, but no such effect is perceptible in the blood of a poisoned animal. It seems, however, to take place locally, where the poison is injected and in a concentrated form comes in contact with the blood. The author denies the disintegration of the corpuscles observed by Mitchell, Halford, and others, and ascribes the dark fluid condition of the blood merely to asphyxia, and not to the corpuscles having lost the power of taking up oxygen, or, as I take it, being prevented from absorbing it by the dilation of pulmonary capillaries. As our patients do not die from asphyxia, yet their blood is both dark, liquid, and undoubtedly shows broken up corpuscles under the microscope; this discrepancy calls for further investigation.

*Action on urine.*—There are frequently large quantities of red and white corpuscles, but neither albumen nor sugar. Urine of poisoned animals very poisonous to others by intravenous injection.

*Local action at the place of injection or bite and its neighbourhood.*—Immediately on the

poison coming in contact with vaso-motor nerve ends, paralysis of the latter and the small ganglia interposed in their course, takes place, followed quickly by extravasations. The latter are only exceptionally due to rupture of capillaries, but blood corpuscles penetrate vessels per diapedesin. Author fails to explain this process but points out that changes in the blood vessels and the circulation consequent on paralysis of vaso-motor nerves, as well as the action of certain drugs on the latter, are calling for further study and investigation.

These are the principal results of Dr. Feoktistow's most elaborate experiments, which in a new direction not indicated by him are still being pursued. I omit the pathologico-anatomical part of his work, as it adds no new feature of importance, but principally shows that the hæmorrhagic process characteristic of viper poisoning extends over nearly all the internal organs.

It will be seen, on comparison, that his conclusions are in substantial agreement on all essential points with my theory of the action of snake poison, an agreement so singular and striking, that but for the fact of my having practised the strychnine treatment of snakebite for years, and reported the matter officially to the Central Board early in 1888, before his researches could possibly have been known here, I could not claim originality, but might be suspected of an act of literary piracy. That travelling by different routes, he by the laborious and difficult one of elaborate experiments on animals,—I by the comparatively easy one of practical observation and careful analysis of the symptoms manifested by my patients,—we have thus met from the antipodes, gives additional support to and establishes beyond all doubt the theory, that snake poison is a nerve poison, depressing and in its complete action entirely suspending the function of the motor and vaso-motor nerve centres.

In the most essential point of this inquiry, namely, the deductive proof and practical application of the theory, Dr. Feoktistow's labours are perfectly negative in results. He does not state why, after ascertaining the undoubted antagonism between snake poison and strychnine, he abandoned the latter as an antidote, but merely concludes the therapeutic part of his work with the assertion, that at the present state of science a physiological antidote can not even be thought of, as we are not able to remove the paralysis of the spinal cord, the intracardial ends of the vagi, the heart-ganglia, the splanchnici, etc. Evidently strychnine, so variable in its action on animals, has failed him, and he has fallen into the mistake of previous investigators. On the other hand,



however, it must be borne in mind that our snakes, with exception of the death-adder, are all colubrines, and that he experimented with viper poison only, on which we have as yet had no opportunity of trying the antidote in practise. Whether it will cope successfully with the powerful concentration on the respiratory centres and the extensive paralysis of vaso-motor nerve ends, which distinguishes the viper poison from that of our colubrines, remains to be seen. Considering the unreliability and variability of the action of strychnine on different animals, the brilliant results which have attended its use in snakebite on man in every instance in which it has been tried here, and considering also that it is our object to save man, the question of the efficacy of the antidote in every form of snake poisoning can only be decided in practice on the human subject.

### CASE OF FOREIGN BODY IN RECTUM CAUSING SCROTAL FISTULA.

READ BEFORE THE N. S. WALES BRANCH B.M.A.

By A. JARVIE HOOD, M.B. ET CH. M. GLAS.,  
HON. MED. OFF. LOWER CLARENCE HOSPITAL,  
MACLEAN, N. S. WALES.

THE notes of the following case are very simple but still are so interesting that I think them worthy of your notice, especially as they exemplify how much mischief may be the result of a small cause.

The subject of these remarks, J. F., æt. 29, consulted me about ten weeks ago on account of some hepatic symptoms, which after about three weeks' treatment entirely disappeared. Before he went home he stated that he had "something" else wrong with his bowels and genital organs, but when I asked him the nature of the ailment he said he would rather come and see me another day. This he did about ten days after, and on questioning him he gave me the following history. Since he was a child he had always been unable to relieve his bowels without first putting his finger to his anus and pushing what he described as a hard stone back into the bowel. Even then, he did not always obtain relief except after taking a dose of opening medicine, and, when the bowels did move, half the fæces came through an opening in his scrotum. He had no actual pain except when very constipated, and had not consulted any medical man for years as the last one had told him there was nothing wrong with him.

I tried to examine him per rectum but it caused such pain that I had to desist. On examining the scrotum I found the opening of a sinus just below the junction of the skin of scrotum with the

skin on under surface of penis, a little to the left of the raphe.

I ordered a dose of castor oil and sent him to lodgings in town, with the instructions to send for me when the bowels wanted to be relieved.

This he did, but unfortunately I did not get his message for two hours after he sent it. When I arrived at his lodgings I found him in great pain from having to wait so long, but he had obeyed my instructions and had not attempted to push the foreign body back. I made him sit over a vessel and gently applied my finger to the anus, when I felt a sharp hard edge of some foreign substance just at the external sphincter. Just as I touched it, and this very gently, I felt it recede, and immediately the bowels moved with great force, not only "per anum" but freely through the fistulous opening in the scrotum.

1st June, 1889. A few days afterwards I admitted him into the Lower Clarence Hospital, and in due course, after freely evacuating the bowels, he was put under the influence of chloroform and I proceeded to examine him.

2nd June, 1889. I had some slight difficulty in getting my finger past the sphincter ani, and just inside it I found a band of hard fibrous tissue attached to the lower or posterior surface of the rectum, its upper surface being crescentic and leaving only a very small opening for the passage of the fæces. I could not find any foreign body even with the most careful examination.

I then inserted, as a probe, a uterine sound through the fistulous opening in the scrotum and, with one finger in the rectum, I could feel the end of the sound immediately above the band of fibrous tissue, which evidently acted as a kind of valve or dam and directed the fæces along the false passage towards the fistulous opening in the scrotum.

While the patient was still under chloroform I operated as follows:—I forcibly dilated the sphincters by inserting the forefingers of both hands through them into the rectum and then widely separating them quickly as one does in a fissure of anus; I then snipped away the band of firm fibrous tissue inside the sphincters with a pair of scissors curved on the flat; then inserted a small speculum into the fistulous opening in the scrotum and scraped the false passage in its whole length right into the rectum, and afterwards washed the sinus with 1 to 20 carbolic solution.

Again I examined the rectum but again failed to detect any foreign body, so he was accordingly taken to his bed.

3rd June, 1889. Next morning he stated that he had passed a good night, with little pain and had slept well: his last evening's temperature had been 100°F. and pulse 110, but the morning's temperature was normal.

As the bowels had not moved I told the nurse to give him in the evening a full dose of castor oil, which she did. Early on next morning (4th June) the bowels moved freely and painlessly, and in the motions were two large peach stones coated with a black substance partly organic matter and partly salts.

When I saw him soon afterwards he looked perfectly well and very happy, and stated that he had been troubled thus since he was a mere child. Subsequently his mother informed me that to her knowledge he had been affected in the manner described for at least twenty years.

He progressed rapidly and in eight days he left the Hospital, the only treatment adopted after operation being absolute cleanliness, keeping the bowels freely open and washing the fistula out with weak carbolic lotion.

When he was dismissed he had complete control of the bowels and no fæces had come per scrotum. I saw him ten days afterwards and he expressed himself as being a new man: he had no trouble at all with the bowels and absolutely no fæces had come through the fistulous opening. On examining the scrotum I could only see a small superficial sore where the sinus had opened but could not insert an ordinary probe  $\frac{1}{10}$  of an inch, so I could conscientiously tell him he was cured.

#### REMARKS.

The interesting points in this case are three, mainly, viz.:—(1.) The duration of symptoms with the inability of rectum to expel the stones with the fæces; (2.) the results of the presence of the foreign bodies, i.e., scrotal fistula and the fibrous band which almost occluded the anus and directed the fæces towards and along the fistula in scroto; and (3.) the rapidity of cure and disappearance of symptoms.

It seems almost incredible that the stones should have been in the bowel for 22 years and no attempt made to have them removed, but that such was the case is undoubted. One would also have thought that the bowel might have expelled them at some time or other, but when he swallowed them the bowel would be so small that the rectum could not force them through the anus, and as he grew older the thick fibrous band forming would, of course, stop all attempts at expulsion.

He does not know exactly how long the fistula was present, but his mother informed me that it did not appear for several years after she knew that the foreign body was present, and I presume it followed the formation of the fibrous band.

The rapidity of cure was most astonishing: in seven days he was able to go home, and in fourteen days the fistula was closed and the action of the bowels natural.

#### ON CHRONIC PLEURISY.

By B. J. ROSS, M.D., OF MACARTHUR, VICTORIA.

Cases of chronic pleurisy, with a continual recurrence of effusion, form objects of great annoyance—to say the least of it—to the patient and dissatisfaction to the medical attendant.

Every suggestion, therefore, to effect a cure in such cases will be received with gratitude.

Potain, who accidentally found that when pure air enters the pleura it is devoid of danger, employed his experience afterwards as a therapeutical agent with great success in cases of chronic exudative pleurisy.

Potain's results and his recommendations seem to be forgotten. Lately Dr. Secretan, of Lausanne, reports a case in the *Révue Médicale de la Suisse Romande*, 1888, No. 7, in which, by some accident, air entered the chest after tapping, with the happy result that definite resorption took place within twenty-seven days. The patient had been tapped several times without lasting effect. There was no family history as to phthisis.

I had under my care a case which had been tapped several times in the Hamilton Hospital. I myself tapped him on February 4th, a fortnight later the first indication of re-accumulation of fluid appeared—viz., palpitation on slight exertion.

Three weeks after operation the *status quo ante* was almost reached again. I felt convinced that simple tapping would be unsatisfactory, and, therefore, decided to follow Potain's recommendation. Although I have failed in effecting a cure, my results are so favourable as to invite a repetition in suitable cases. In my patient there is some family history of phthisis.

On April 30th, about eleven weeks after the first tapping, I again operated, and this time established an artificial pneumo-thorax.

As I did not know of any means recommended for the purification of air before entering the pleura, I devised a scheme which will recommend itself to the general practitioner on account of its simplicity. I used a common trocar without stopcock and fixed an indiarubber tube about a yard long to the canula and pierced the trocar through it. The tube was filled with pure water and closed by spring clothes-pegs. As soon as the trocar is withdrawn the slit in the indiarubber tube will close airtight.

After about three pints of clear serous fluid were drawn off by gravitation, and deep inspirations failed to bring any more, a glass funnel filled with sublimate cotton wool was fixed to the indiarubber tube. Round canula the same material was tightly packed. Before allowing air to enter

the chest great pains were taken to bring the fluid in contact with the cotton wool. To make the air enter the pleura the funnel was lifted above the level of the patient, and he was directed to draw a long breath while the pegs were removed.

Five such aspirations were made at short intervals.

I desisted on the patient informing me that he felt some pressure on his chest, and that the pains which were complained of in the scrobiculus cordis after tapping had altogether disappeared.

Patient felt very comfortable and much freer in his breathing after the operation. The temperature never reached  $99\frac{1}{2}^{\circ}$  Fahr. I did not examine the chest until the following day, when I found a pneumo-thorax occupying the front of the left side down to a line about  $1\frac{1}{2}$  inches below the nipple. As time wore on this diminished. In about a week's time I found increased resonance on apex and a distinct tympanic area between the third rib, sternum, and fifth rib, about 2 inches wide. A few days later these, too, had disappeared.

Patient presented himself again seven weeks after the operation, complaining of the well-understood symptom of palpitation. I found the heart slightly, but distinctly, dislocated, although I was unable to detect any effusion in the pleura.

The respiration murmurs were not materially different to those I heard four weeks after the operation.

While writing this, about nine weeks after the operation, the patient presented himself again.

On examination I found no material alteration in the position of the heart to what I last observed. Slight respiratory murmurs are audible all over left side. But, to my surprise and pleasure, I found a decidedly clearer resonance there, specially between scapula and spine and somewhat below scapula, than I had noticed five weeks previously.

Should the effusion return—which there is reason to fear it will—I intend combining Potain's method with Hubbotin's operation for empyema of long standing.

To assist nature in her endeavour to obliterate the pleural cavity by retraction of the walls of the thorax Hubbotin recommends to make two incisions, one on the outer margin of the pectoralis major and another in the posterior axillar line, and then excise small wedges out of the fourth, fifth, and sixth ribs, together with the periosteum. The pleura is not opened.

The wound is stitched up and heals *prima intentione*, no drainage being necessary. About a week later I will tap and introduce air as before.

The effect of Hubbotin's operation is self-evident. Of course some degree of scoliosis will result, but this will be limited, as the parts of the ribs left will support the spine.

As there is evident tendency in my patient to retraction of thorax, I feel sanguine that the plan of operation as given above will effect a definite cure.

P.S.—Since writing the above notes the general condition of patient has greatly improved. On the 1st inst., four weeks after the last examination, I found the heart to be almost in its physiological position, respiratory murmurs being audible all over the left side. Palpitation of heart very seldom felt, and then only slightly. Shortness of breath greatly improved, not noticeable during ordinary work. No signs of effusion.

From these facts I think I am justified in prognosticating a complete recovery, and will not, therefore, have to resort to the proposed operation.

The patient was taken bad on October 12th, 1888, and was tapped for the first time three weeks later.

#### AN INTERESTING CASE OF STONE IN AN INFANT $\text{ÆT. 16 MONTHS}$ .

By C. E. TODD, M.D., ASSISTANT PHYSICIAN TO THE ADELAIDE HOSPITAL.

ON the afternoon of the 16th May I was called to see a child  $\text{ÆT. 16 MONTHS}$ . The mother told me that he had passed no water for upwards of 24 hours, and that he was in great agony. On examining his abdomen I found the bladder distended up to the umbilicus; its shape could be clearly seen through the bulging abdominal walls. The child was struggling and straining violently, and a few drops of urine were dribbling away every now and then. The mother took him at once to my house, and with some difficulty I passed a No. 4 silver catheter and drew off three pints of water. Just as the catheter passed into the bladder it struck against a stone. I was unable at this time to pass a sound because the child had a very light prepuce and I could not get the point into the urethra. On the 18th May I had everything ready to do lateral lithotomy. I slit up the tight foreskin and enlarged the urethral orifice to allow the sound to pass. I introduced the instrument half-an-inch when it struck the stone firmly wedged in the urethra. I removed it with the scoop of an ordinary director. The calculus was a uric acid one, with a slight phosphatic deposit, of an ovoid form, and the size of a large pea. This case seems to me of interest, 1st, because the child had no symptom whatever until complete obstruction came on; and, 2nd, because, looking at the stone afterwards, one would not have thought it possible that so large

a body could pass along the urethra of so young a child. The stone must have passed along the canal in a very few hours, because I sounded a second time on the afternoon of the 17th May, and it was then in the bladder.

Adelaide, 2nd July, 1889.

### WOUND OF RADIAL ARTERY.

BY ST. GEORGE QUEELEY, GOVERNMENT MEDICAL OFFICER, MAYTOWN, AND SURGEON TO THE PALMER DISTRICT HOSPITAL, NORTH QUEENSLAND.

THE following case of wounded radial artery came under my notice lately, and, I think, worthy of note, from the length of time that elapsed before patient was treated, and from the quantity of blood lost. W. F., Miner, æt. 28, while working in shaft of Anglo-Saxon Mine, received a cut across left wrist, occasioned by a fall of sharp quartz. The wound was about two inches long, extending from base of thumb upwards and inwards. There was considerable hæmorrhage for some time, but it was controlled, and after three days the patient was about with arm in a sling. On the fifth day hæmorrhage set in again, and the patient lost a large quantity of blood, but a poultice of salt again stopped it. From the great loss of blood he naturally became very weak and anxious, especially as on the twelfth day a loss of blood again took place; so I was sent for, and arrived on the fifteenth day after the accident. The distance I was obliged to travel being 40 miles over very rough country. I did not arrive until late at night, and as patient was comfortable and no hæmorrhage had taken place for 15 hours, I thought it better not to do anything until daylight. Next morning I visited the camp and found that the man had slept well and felt better. On removing dressing, I found the wound looking healthy and commencing to granulate. As there was no sign of blood now for 26 hours, I merely applied lint saturated with carbolic oil, and told his friends to use same three or four times a-day. I also improvised a tourniquet with a piece of cork, and marked a place over brachial artery, with instructions to apply it immediately in case of any fresh discharge, and that the moment patient could sit on a horse, he was to come into town—the food, &c., being pretty rough where he boarded, and he required plenty of nourishment. I visited the case several times during the day, but was obliged to leave for town, having several patients in the hospital to see. Three days after I heard hæmorrhage had set in worse than ever, and could not be controlled, and that patient was being carried

into hospital in a *dying state*. He arrived 72 hours afterwards, and, when admitted, was very low and restless and quite blanched. I had him immediately placed on operating table, and found his forearm greatly swollen from several ligatures being tied tightly round arm. He took chloroform badly, and it was some time before I could get him under its influence. The bandages, ligatures, &c., were removed, and blood immediately spouted from wound, but was as quickly stopped by tourniquet. I found lower end of artery easily, and twisted it, but could see no sign of upper part, so made an incision upwards and inwards, over course of artery for about two inches, and at last succeeded in tying it. The wound was closed by three catgut stitches, and a piece of lint placed over it. Patient suffered some pain next day, which was relieved by sub-cutaneous injection of morphia. His diet consisted of strong meat essences, milk, eggs, port wine with iron, and ammonia as a tonic. Twelve days after the ligature came away, and patient was discharged on thirtieth day cured.

Now the point in this case is, should I have operated on my first visit, or was I justified in my treatment? Some people (lay of course) thought I should have done so immediately on my arrival, but as there was no sign of hæmorrhage, and as none had taken place for 26 hours, I hold that I was right.

[Taking all the circumstances into consideration, we are of opinion that the surgeon in this case acted rightly in not tying the artery on his first seeing the patient, and that his course of treatment was extremely judicious. Such cases must not be judged by the standard of city hospital practice.—Ed. A. M. G.]

### ORIGINAL TRANSLATION.

#### ON THE ÆTIOLOGY OF PERICARDITIS.

BY DR. G. BANTI, PROSECTOR OF THE PATHOLOGICAL INSTITUTE OF FLORENCE.

(TRANSLATED FROM THE "DEUTSCHE MEDICINISCHE WOCHENSCHRIFT.")

BY R. H. TODD, M.D. et CH.B., DUBLIN, F.R.C.S. IREL.

IN January, 1887, I had in the course of a few days opportunities of making autopsies on three bodies, which, among other pathological conditions, were examples of diffuse pericarditis. I studied the three cases in their ætiological aspect, and made several experiments upon animals, and I have determined to publish them as a further contribution to the study of the ætiology of pericarditis.

I relate, briefly, the three cases :

Case 1.—G. T., *æt.* 48, had for some years symptoms of chronic nephritis, (dyspepsia, polyuria, slight albuminuria, &c.); he died on January 16, 1887, during an attack of uræmia, after a fortnight's illness. A week before death, symptoms of pericarditis supervened.

Autopsy.—Granulated, indurated, contracted kidneys, fibrinous adhesions of pleura, atheroma of aorta, uratic deposits in the different joints, hypertrophy of left ventricle, diffuse plastic pericarditis, and the surface of the pericardium covered with plastic exudation, which gave the heart a villous appearance. The fibrinous layer was removed easily with the blade of a knife, and the pericardial surface had quite a glossy appearance.

In the coverglass preparations of the pericardial exudation, no bacteria could be found. To secure greater certainty, I varied the staining methods, using the aqueous solutions of Gentian Violet, and of Fuchsin: Ehrlich's and Löffler's solutions: Gram's method, and even the methods of staining tubercle bacilli. I left several cover-glasses over 24 hours in the staining fluids without getting any better results. The examination of sections hardened in alcohol showed also the complete absence of bacteria. I made cultures in gelatine with the exudation, and also in agar and blood-serum. The gelatine cultures were kept at 22° C., the others at 85° C. All remained sterile. With fragments of the exudation I inoculated two guinea pigs and a young dog, which showed no subsequent signs of illness.

Case 2.—A. I., aged 81. Sickened with pneumonia on January 1, 1887. On January 6 pericardial friction supervened. She died on January 10.

Autopsy.—Croupous pneumonia (grey hepatisation) in the posterior part of the upper and lower lobes of the right lung. Red hepatisation in the posterior part of the lower lobe of the left lung. Plastic pleuritis over the diseased parts, diffuse plastic pericarditis. The microscopic examination of the exudation from the lungs, pleura, and pericardium showed in every case the presence of capsule-cocci, for the most part in pairs as diplococci, and in a few cases in chains, which retained the staining by Grams' method. The gelatine culture remained sterile at 20°C.; the agar and the serum cultures, at 35°C., showed a very slight vegetation, like drops of dew, which is peculiar to the diplococcus pneumoniae of Fränkel. The puppies inoculated with the culture died of septicæmia. Two puppies also died of the same condition, one of which was inoculated with the pericardial exudation, and the other with the exudation from the left lung.

Case 3.—C. N., 55 years of age, sickened with pneumonia on January 11, 1887. On the 19th she showed symptoms of pericarditis, and died on the 23rd.

Autopsy.—Croupous pneumonia (red-grey hepatisation) in the posterior part of the left lung, extending through the upper and the greater part of the lower half. Pleuritis on the left side with a fibrino-purulent exudation. The pleura, corresponding to the pericardium, was inflamed and covered with exudation. A diffuse pericarditis. The cavity of the pericardium contained a thick creamy fibrino-purulent exudation. The microscopic examination of the pulmonary exudation showed numerous micrococci in pairs and chains, and in irregular conglomerated masses. In some the capsule was recognizable, in others it was absent. In the pleural and pericardial exudation we saw cocci also, but none had the capsule. In the gelatine cultivations of the pulmonary exudation I demonstrated the staphylococcus pyogenes aureus, and albus; of the albus, however, only a few colonies. In the agar cultivations both kinds of staphylococcus developed, and separate from these were colonies of the diplococcus pneumoniae of Fränkel. With these colonies I made inoculations in agar, and the characteristic growths of the diplococcus developed. And with this I produced death from septicæmia in dogs. The linear culture on blood-serum of the pulmonary exudation did not give such good results as the agar cultivations because the richer growth of the staphylococcus choked the growth of the diplococcus pneumoniae. In the gelatine culture of the pleural exudation staphylococcus aureus and albus developed. In the gelatine and agar cultures of the pericardial exudation, staphylococcus aureus and albus developed. There was none of the diplococcus pneumoniae. And as I had made four agar cultures, and all gave an equally negative result, we can assume with certainty that in the pericardial exudation only the staphylococcus was present.

The above cases are too few to make a foundation for complete study of the ætiology of pericarditis. Nevertheless they seem to me sufficient to allow of some conclusions being drawn. These cases make it clear that we may divide pericarditis ætiologically into two groups, the infectious and the non-infectious. The first case is an example of the non-infectious pericarditis; in it the examination of the pericardial exudation has shown the entire absence of even a single micro-organism. This fact has a certain value because it again proves that the occurrence of acute inflammation of the internal organs is not necessarily associated with the presence of bacteria. It is recognised as certain that there can be a non-parasitic acute

inflammation, as that which arises from application of jequirity and oil of turpentine; and it may be contended also with Baumgarten that there are inflammatory non-parasitic diseases which arise spontaneously. The case related above appears to me to leave no doubt upon the matter. It is, on the other hand, worthy of note that the exudation was plastic without showing any signs of suppuration. The occurrence of the pericarditis is, according to my opinion, to be attributed in this case to the disease of the kidneys. In the course of chronic nephritis, inflammation of the serous membranes are very common; they have generally a long course without producing marked symptoms, and are recognized in the autopsy by the existence of adhesions and thickening, and other signs. They often take on an acute form, as in the above case.

The cause of this inflammation is perhaps of a chemical nature, and depends on the presence of abnormal substances, which, when not excreted as they should be, by the diseased kidneys, accumulate in the blood, and by their presence irritate certain tissues, so as to excite inflammatory action in them. There are innumerable forms of uræmic inflammations, though for their production a severe attack of uræmia is not necessary. The chronic forms of inflammation have a tendency to appear in cases of slight masked uræmia, which often remains unrecognised or is mistaken for dyspepsia. The acute inflammations, on the contrary, are commonly complications of the more severe uræmic attacks, as just referred to in the case before us.

The second and third cases belong to the group of infectious pericarditis. Both developed during the course of a croupous pneumonia: yet, while in the second case the pericarditis was to be attributed to the same bacteria as caused the pneumonia, a secondary localization of the diplococcus pneumoniae being produced; in the third case the pericarditis was the result of an infection which existed in association with the pneumonic infection. In this, the third case, the pneumonia was due to the pneumococci (which were, in fact, found in the pulmonary exudation), yet either at the same time or subsequently, other bacteria also, such as staphylococcus aureus and albus, penetrated into the lungs. It was these latter which brought about the complication in the pericardium; and thus at the same time there were established in the same individual two infectious processes, different in kind, though at the same time associated with one another in a definite relationship. This was an instance of a compound infection, of which we come across so many other examples in the pathology of infectious diseases. Perhaps those might be of a

different opinion who maintain that the croupous pneumonia is not always caused by Fränkel's pneumococcus, but often also by other bacteria, such as the staphylococcus. These would regard the second and third cases as identical, and the pericarditis and the pneumonia merely as different localizations of the same poison.

I will not now delay to enter upon the question of the different causes of croupous pneumonia, as I am reserving this subject for a later work. It suffices to say that through the material which I have collected I am prepared to maintain that in all cases of croupous pneumonia the presence of Fränkel's pneumococcus is constant. There could be no more logical argument, than that derived from the study of the preceding cases, for ascribing the development of pneumonia to the presence of the pneumococcus. One could reply in another way, viz., that the pneumococci were also the cause of the pericarditis, but that in the course of the disease they were destroyed. I have no argument with which to oppose absolutely this hypothesis, but it appears to me to have very little probability. Why should the capsule cocci have been dead in the pericardium while they still remained alive in the lung, where the disease originated. We could not ascribe their death to the simultaneous presence of the staphylococci, because these latter were found also in the lungs, together with the pneumococcus.

It is a question in what way in the second and third cases did the bacteria reach the pericardium from the primary focus in the lungs. In the third case there existed a diffuse pleuritis, and that part of the pleura which covered the pericardium was inflamed. In the exudation of the pleura the staphylococci were found in the same way as in the exudation from the pericardium. Therefore, it is very probable that the inflammation propagated itself from the pleura to the pericardium. I do not think that one can maintain as much in the second case. Here also the pleuritis was present, but it remained limited to the posterior part of the chest cavity and that part of the pleura which was in contact with the pericardium, and the mediastinum was quite healthy. It is therefore probable that the pericarditis in this case was of hæmatogenous origin. In order to explain more clearly this kind of origin, I have tried whether or not it was possible to induce pericarditis experimentally in animals; and for this purpose I used the diplococcus pneumoniae. It is known that the bacteria injected under the skin of puppies produces a rapidly fatal septicæmia. In many cases we find in the dead animals a plastic peritonitis, in the exudation from which the capsule cocci are found in great numbers.

Although for the purposes of studying these bacteria I have sacrificed a great number of dogs, I have never succeeded in finding pericarditis where the septicæmia ran an acute course. This was only produced when I injected the culture through the chest wall into the lung or into the pleura. In the same way pericarditis followed when the pneumococci were injected into the pericardium; but this kind of infection is to be distinguished from that which occurs in human pathology, so that the results arrived at cannot be taken into serious account.

I undertook to discover whether it was possible to produce pericarditis by injecting the pneumococci under the skin of puppies. When one infects animals through the skin it is certain that the pericarditis so caused is hæmatogenous, and proves that the bacteria, which circulate in the blood in the course of the septicæmia, become localized. I followed an analogous method, which has proved useful for the experimental production of osteomyelitis, and endocarditis; i.e., I produced an artificial injury in the pericardium. For this purpose I laid bare the sac of the pericardium in the puppy. The operation is fairly easy, if one makes the incision in a position corresponding to the third intercostal space on the left side. One cuts through the fibres of the pectoral and intercostal muscles, seizes the internal mammary artery with a forceps, and compresses it so as to prevent hæmorrhage. In order to avoid opening the pleura one must not go too far from the sternum. In this way one reaches the pericardium, where it is uncovered by lung. Sometimes the thymus covers the pericardium, but it is very easy to push it aside into the chest cavity.

First, I convinced myself of the results obtained by injecting one or two drops of oil of turpentine into the pericardial cavity, and by cauterizing the parietal layer with a white-hot platinum needle. The operation was conducted under careful antiseptic precautions. The injection of one or two drops of oil of turpentine into the pericardial cavity, produced a plastic inflammation which confined itself to the area touched by the oil of turpentine, and had no tendency to spread. The exudation contained no bacteria. The cauterization of the parietal layer of the pericardium with a white-hot platinum needle, left a small eschar around which a zone of inflammatory reaction formed. After these control-experiments I proceeded to others, in which after having injected the oil of turpentine, or having cauterized the pericardium, I injected the pneumococci under the skin. It would be too

t tedious to describe here all the experiments. I confine myself therefore to an account of two of them, which may be regarded as types of the rest.

Experiment I.—On August 8th the pericardium of a puppy was exposed with careful antiseptic precautions, and with a sterilized needle a drop of oil of turpentine was injected into the pericardial sac. I stitched up the muscle and the skin, and sealed the wound with iodoform-collodion. On August 10th I made a small incision in the back in the right renal region, drew the skin up into the form of a pouch, and introduced a fragment of agar containing a two-day-old culture of the diplococcus pneumoniæ. I closed the wound with sutures and iodoform collodion. The puppy died on the morning of the 13th with septicæmia. Large numbers of capsule-bearing cocci were present in the blood; there was enlargement of the spleen. The peritoneum, pleura, and lungs, were healthy. There was diffuse pericarditis, and the surface of the serous membrane was covered with a plastic exudation, which made it rough and uneven. The pericardial exudation contained capsule-cocci only, and those in large numbers. The agar culture of this exudation contained the characteristic vegetation, and induced septicæmia, when injected into a puppy.

Experiment II.—On August 14th I exposed the pericardium of a puppy, and cauterized the parietal layer with a white-hot platinum needle. I applied the usual after treatment, and on the following day introduced into a skin pouch the agar culture of the pneumococci. The dog died on August 17th, of septicæmia, as was proved by enlargement of the spleen and the presence of capsule-cocci in the blood. The peritoneum, pleura, and lungs, were healthy. Diffuse pericarditis with plastic exudation was present, which resembled that of the first experiment. The exudation contained a large number of pneumococci, the culture of which in agar produced death in other dogs. These experiments, and similar ones which I do not here relate, will show that one can produce in dogs, a hæmatogenous pericarditis by the action of the diplococcus pneumoniæ. The injuries produced by oil of turpentine seemed to favour the localization of the diplococci in the pericardium, and to act as a predisposing cause of disease.

There is no doubt that there are several kinds of hæmatogenous parasitic inflammations, developing in organs not predisposed to inflame, but this occurs, as in the well-known experiments of Ribbert on endocarditis, only where some cause is at work which retains the pathogenic

bacteria in that organ. I regard it moreover as wrong to allow this to be accepted as an universal principle, but I would rather assume that for the development of a hæmatogenous infective disease a special condition of the organ is necessary, by which the bacteria are retained, and which permits the parasites to multiply and to display their pathogenic activity. What this condition is only too often escapes our methods of investigation. In which of these two ways the artificial injury of the pericardium acts, I do not undertake to determine from want of positive evidence. It may be that the injury only favours the pericarditis by producing the retention of the bacteria; or it may be that it in some way weakens the resisting properties of the tissues. Certain it is that the cauterization and the injection of the turpentine oil are violent injuries compared to those which, in the natural course of an infectious disease, bring about the localization of the parasites, and which we distinguish by the vague terms, lesser or greater predisposition. The experimental parasitic pericarditis is easy to produce, if we wait 24-28 hours between the injection of the turpentine oil, or the cauterization, and the injection of the pneumococcus. If we perform the one operation immediately after the other we often fail to attain our end.

It is certain that the pericardium, though it is so seldom affected in the course of the common septicæmia, offers more favourable conditions for the localization of the diplococci than any other organ in the puppy. I have tried in vain, by analogous methods to those which I used to produce pericarditis, to induce meningitis. All the experiments gave negative results.

In their treatise of the etiology of epidemic cerebro-spinal meningitis Professor Foa and Dr. Bordoni-Uffreduzzi, relate that they found pericarditis in several cases of septicæmia in dogs. These cases are to be distinguished nevertheless from the experimental pericarditis produced by me. The pericarditis observed by them was a very rare occurrence, and distinctly appears to have been present in a more chronic form of septicæmia. Moreover it was accompanied by peritonitis, pleuritis, mediastinitis.

In my experiments, on the contrary, the inflammation of the pericardium was the only localization, while the pleura, and peritoneum, and mediastinum, were uninjured; and it occurred in cases of septicæmia much more acute. Without maintaining that it is constant, I can at least say it is never absent, when I proceed on the methods which I have related.

Sydney, June, 1889.

## PROCEEDINGS OF SOCIETIES.

### NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE eighty-second meeting of the Branch was held at the Royal Society's Room, Sydney, on Friday the 5th July, 1889, at 8.15 o'clock. Present: Dr. Fiaschi (President) in the chair; Drs. G. A. Marshall, Hankins, Hodgson, Rennie, Todd, Cotton d'Englesqueville, Scot-Skirving, Jarvie Hood, Breneman, Fisher, Marano, Martin, Wright, Worrall, Roth, Quaife, Kendall and Crago. Visitor, Dr. Burland.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the death of Dr. McDonagh since the last meeting of the branch.

DR. HODGSON proposed and Dr. Jarvie Hood seconded: "That a letter of condolence be forwarded to the relatives of the deceased gentleman." Carried.

The following gentlemen were elected members of the branch: Dr. Wright and Dr. P. McDonnell.

DR. JARVIE HOOD read a paper on "A Case of Foreign Bodies in the Rectum, causing Scrotal Fistula," which will be found on page 285.

DR. MORGAN MARTIN exhibited a patient supposed to be suffering from Thoracic Aneurism. The patient was carefully examined by the members present.

DR. FIASCHI said he agreed with Dr. Martin that the patient was suffering from Thoracic Aneurism, and would suggest as a way of confirming the diagnosis, bandaging each limb and thus increase the blood tension.

DR. SCOT-SKIRVING believed it to be a case of Thoracic Aneurism, and as another mode of assisting the diagnosis he would suggest that nitrate of amyl be given and its effects noted.

DR. TODD read a paper on "The comparative value of the methods of treating the accidents of artificial general anaesthesia."

DR. HODGSON said there were one or two matters in Dr. Todd's paper with which he did not quite agree. It was remarkable that the anæsthetic had more influence upon the fifth pair of nerves than upon any others. He (Dr. Hodgson) believed that electricity had a stimulating influence upon the heart to a very marked degree. In the case of an accident in the administration of an anæsthetic, he (Dr. Hodgson) would not wait to invert the body, but—if death appeared to be impending—would pull the head well back, so that the patient would have the advantage of a free passage of air.

DR. FIASCHI congratulated Dr. Todd on his able paper, and said he (Dr. Fiaschi) quite agreed with the suggestion that drawing the tongue out forcibly was not the best mode of procedure, but, instead, the head should be raised. Dr. Todd might suggest some simpler plan than that of raising the table on chairs, as that would entail a number of assistants. The great difficulty to contend with was that medical men did not take ordinary care in gradually inuring the patient to the use of either ether or chloroform. It is always better to give the drug slowly and steadily, without any sudden increase.

DR. TODD, in reply, said with regard to the remark of Dr. Hodgson as to the chloroform having a greater effect upon the fifth pair of nerves, the fact is that many medical men are in the habit of giving what they call a whiff of chloroform in minor operations, and this in itself is a mistake, as, when an anæsthetic is to be administered, no matter how slight the operation, it should be properly given, as it is very often in the small operations



a great many of the accidents attending the administration of anaesthetics occur. He (Dr. Todd), entirely agreed with Dr. Fiaschi's remarks regarding the gradual administration of the anaesthetic, and thus get the patient accustomed to the drug.

DR. MARANO read some notes on a case of "Lupus Vulgaris." A discussion ensued, in which Drs. Roth, Fiaschi, Rennie and Kendall took parts.

The PRESIDENT (Dr. Fiaschi) gave notice (for Dr. Clubbe) of the following resolution: "That in the opinion of this Branch of the B. M. Association, when dealing with Friendly Societies its members should use the agreement that was drawn up by a sub-committee appointed by this Branch some time ago."

MR. G. P. HANKINS said he had a matter to bring before the members. A police officer had called upon the members of the profession asking that information be given to the authorities if a man presented himself in consultation for a pistol-shot wound. He (Dr. Hankins) would like to know what the duty of a medical man was in such a case?

After discussion, in which Drs. Fiaschi, Jarvie Hood, Hodgson, Marano, Crago, Worrall, Todd, and Quaife took part, it was resolved that the profession were justified in giving the required information to the police authorities.

#### SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting held at the Adelaide Hospital on the evening of July 25. Present: Dr. Cleland (President), in the chair; Drs. J. A. G. Hamilton, T. K. Hamilton, Hayward, Clindening, A. A. Hamilton, Cawley, Symons, Ewbank, Stewart, Cookson, Hynes, Stirling, Lendon, Swift and Poulton (Hon. Sec.)

The minutes of the annual meeting were read and confirmed.

#### EXHIBIT.

DR. T. K. HAMILTON showed a boy on whom he had performed Frost's Modification of Mules' operation for enucleation of the eyeball, and read the following notes:—

##### FROST'S MODIFICATION OF MULES' OPERATION.

Boy aged eight years; seen for the first time on 3rd of this month; six weeks previous to this date had accidentally wounded his left eye with a dirty pen knife, which injury immediately destroyed the vision of the same. A penetrating wound was found involving the lower third of the cornea and about 2 m.m. of the sclerotic. The anterior chamber was obliterated; pupil, 3.5 m.m.; complete posterior synechia and opacity of the lens; general vascularity of the cornea, with ciliary injection most marked in the vicinity of the wound.

Tension + 1? Vision = 0

Considerable pain with photophobia and lachrymation.

**Right Eye.**—Weak, watery and slight ciliary injection. Enucleation recommended and performed same day in the usual way, and a hollow glass sphere (largest size of those used by Mules) introduced into the capsule of tenon, and the latter cavity carefully closed over the sphere with four deep and four superficial sutures, a drain of a few strands of silk having been introduced between the two layers of sutures.

The case is now exhibited three weeks after the operation, the union and movements of the stump being perfect.

This operation has been recommended by Adam Frost, as possessing on the one hand the advantages claimed by Mules for his operation viz., a freely movable stump for the subsequent adaptation of the artificial eye, and thus the necessary prevention of that sunken appearance which is so conspicuous after an ordinary enucleation, and as avoiding on the other hand the retention of the globe in a case such as this where the danger of sympathetic disease is so considerable.

A microscopic section of the injured eye also exhibited; the section was made through the corneo-sclerotic margin in the neighbourhood of the wound, and a very large number of "inflammatory cells" were seen filling the connective tissue of the part.

DR. T. K. HAMILTON also exhibited adjustable shields for a nasal speculum, and said:—These shields I have devised as additions to the nasal speculum, to secure more thorough protection of the nostril in making intra-nasal applications of the galvano cautery, chromic acid, etc. They can be so adjusted as to protect any part of the lateral aspects of the nostril within view anteriorly, or likely to require protection in operations of this kind.

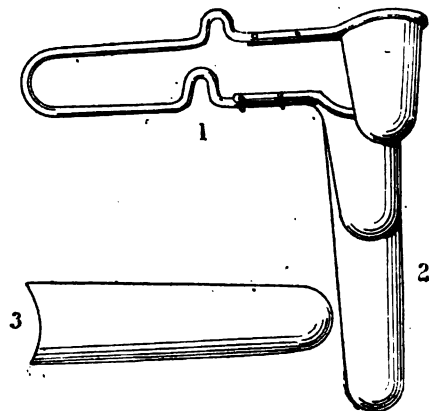


Fig. 1.—Bond's modification of Macdonald's Nasal Speculum, with adjustable Shield (Fig. 2) in situ, and pushed in full length. Fig. 3.—The other Shield loose. The Shields can be adjusted in the Springs so as to project the required distance beyond the Speculum.

(Instrument made by Otto Boetiger, Flinders-st., Adelaide.)

I have found them extremely useful in those cases of enlargement of the middle turbinate body, in which this latter abuts on the septum. The shield can here be readily (after the application of cocaine) pushed up between these two opposing surfaces, and then free application of the cautery, etc., can be made without any risk of touching the septum, or of causing thereby subsequent adhesive inflammation from the formation of two raw surfaces approximating each other.

DR. POULTON showed a man whom he had trephined three weeks previously for compound comminuted fracture of the frontal bone, and who had made a good recovery.

DR. HAYWARD moved.—1. That in future this branch meet at 8 p.m., for the exhibition of pathological cases and specimens, and that the literary business commence with the reading of minutes at 8.30 p.m.

2. That exhibitors give notice of their exhibits before noon on the day of Meeting.

3. That every exhibit be accompanied by a memorandum, furnished by the exhibitor, setting forth the points to be illustrated, in form, ready for publication.

DR. A. A. HAMILTON seconded the motion, which was carried.

Mr. F. W. MONSELL, L.R.C.S. *et* L.M., L.K.Q.C.P.I., of Port Pirie, was elected a member.

DR. J. A. G. HAMILTON, Vice-President, read notes on a case of Intestinal Obstruction which was followed by a discussion.

## CASE OF INTESTINAL OBSTRUCTION.

By J. A. G. HAMILTON, M.B., &c.,

KAPUNDA HOSPITAL, SOUTH AUSTRALIA.

H. K., aged 36, farmer.

Previous history.—Stated that he had been quite well except for intermittent attacks of constipation up till Sunday the 24th of March. When after an unusually heavy dinner, felt pain in stomach, and not getting better applied for and was admitted to Kapunda Hospital.

When first seen by Dr. Monsell, he presented somewhat a sallow complexion with a drawn and pained expression, eyes slightly sunken, constant vomiting of a stercoraceous character, very restless; stated his bowels had not been opened for seven days.

On examination, abdomen large and tympanitic, with the exception of an ill-defined tumor to the right of, and on a line with the umbilicus, extending from 2 inches below the ribs to 2 inches below the umbilicus; somewhat larger than an orange; gave rather a dull note on percussion; very tender, and after examination pain greatly increased; liver dullness normal. Was diagnosed as a case of intussusception; was given  $\frac{1}{4}$ gr. morphine hypodermically, and ordered a large soap and water enema with long tube, which brought away some thick light brown fæces, but no lumps. Ordered patient opii, ext. belladonnæ and calomel,  $\frac{1}{4}$ gr. of each every 3 hours.

April 1.—Still vomiting, pain still severe, tumour the same, abdomen more distended and tympanitic dullness in both flanks. Complained of great thirst, still vomiting everything. Gave another large injection with same result. Ordered patient opii and ext. belladonnæ,  $\frac{1}{2}$ gr. each every 2 hours.

April 2.—Expressed himself as free from pain, face cachectic and pinched, eyes more sunken, vomiting as before, abdomen more distended. Ordered sodæ sulph.  $\frac{3}{4}$  every 2 hours.

April 3.—Condition no better, pulse small and compressible; temp. normal. Decided upon doing a Laparotomy.

With the assistance of Dr. Monsell, I operated at 4 p.m. same day. Having made the usual incisions I introduced 2 fingers but could detect nothing abnormal; on curved incision upwards 2 inches found small intestines immensely distended with gas, presenting a dusky appearance and here and there a small ecchymosed patch. Small punctures were made in the gut, which allowed the gasses to escape and facilitated the examination, but even then it was found impossible to keep them within the cavity. After a little time numerous bonds of adhesion were revealed between the great omentum and transverse colon, constricting the lumen of the gut. After carefully breaking these down noticed a liquid of semi-fluid consistency in the small intestine, punctured the gut again with a small Deulafoyn needle, when a small quantity of liquid fæcal matter escaped similar to the vomit. Having thought we found the cause of obstruction, I proceeded to replace the intestines, which had been carefully protected with hot sponges, but so great was the distention with fæcal matter and gas, that it was found practically impossible to do so without injuring the already damaged gut, so I made a small incision transversely in the gut, and about 2 quarts of thin fæcal matter made its escape. Closed the wound in gut with eight sutures, thoroughly washed out the abdominal cavity, mopping out with dry sponges; returned the bowel, and closed the abdominal wound in the ordinary way, leaving a drainage tube in lower angle of incision.

Patient very much collapsed after operation, but, after several injections of ether, came to, and felt fairly comfortable. Temp. 97.2; pulse very small and weak. Took small quantities of brandy. Passed a restless night; great thirst and frequent vomiting of a light brown offensive fluid, with much pain. Died suddenly at 8.45 next morning; was quite conscious up to time of death.

Post-mortem.—About 3 hours after death and 12 hours after operation. On freeing the sutures in abdominal wall, found several small adhesions between the margins of the abdominal wound, the wall of which, by the way, was of an unusual thickness—a fact observed during the operation. The whole surface of his intestines was covered with a fine film of plastic lymph, gluing the whole mass of intestines together; followed up the transverse colon where we had found the adhesive bands to the splenic flexure, but found nothing. Proceeding in the opposite direction found a large nodular mass at the ilio-cæcal valve, about the size of a closed fist, and of the colour of a bunch

of dilated veins. Ligatured the intestine above and below for about 8 inches, detached it, and found about 4 inches of small intestine along with an unusually long vermiform appendix, invaginated in the ascending colon. On freeing a few incisions, with some difficulty pulled out the invaginated portion, but still felt in the sac a peculiar nodular mass, giving one the idea of impacted scibolæ; but, on opening the gut, found a hard melanotic looking mass—ill-defined, and extending for about half the circumference of the gut, transversely, and about 3 inches longitudinally, the interior surface of which appeared to be breaking down, and of a short, black, fibrous consistency. On cutting through the mass, it cut hard; the cut surface was of a dirty white appearance.

Remarks.—This case presents some striking peculiarities to the operating surgeon.

1. We have an intussusception, which probably started on the Sunday after a hearty meal; but most of the prominent symptoms of this affection—such as tenesmus, blood in stools, &c.—were absent.

2. We have a malignant growth, which must have been there for some time, but presenting none of its leading features, as the man was in good health until the onset of pain.

3. We have bands of adhesions constricting the transverse colon, and without, apparently, any connection with the intussusception, which led at the time of operation to the conclusion that they were the cause of obstruction.

4. The difficulty of diagnosis, the combination of these circumstances along with the unusually thick muscular abdominal parietes, and the immensely distended intestines over the tumour, thus masking the percussion note.

DR. HAYWARD read the following notes on a case of

#### HEMATEMESIS NEONATORUM.

I attended Mrs. G. with her first child. The second stage of labour was very prolonged, and necessitated the use of the forceps. The vulvar orifice being very small great care was required, in order to avoid laceration of the perineum into the rectum, and as the pains were very feeble, delivery was accomplished three-quarters of an hour after the forceps were first applied; the mother, during this time, was under the influence of chloroform. The child, a male, was rather small and feeble, and some minutes elapsed before respiration could be induced, and, in order to sustain it, artificial respiration had to be performed at intervals for nearly

half-an-hour, when it became established; but the child did not cry for two days. I gave instructions that the child should be quickly washed but not dressed, but wrapped up warmly in flannels and to be nursed before the fire, the mother not being in a condition to have him with her. Seven hours after delivery, the child was seized with a convulsion lasting about three minutes, and these attacks continued at intervals of about half-an-hour for the next 15 hours, during the whole of which time he exhibited no signs of consciousness. At the end of this time he began to vomit bright arterial blood, and this was succeeded at short intervals by dark grumous fluid, and now and again a repetition of the bright blood took place, the convulsions at the same time becoming less frequent and ceasing about the same time as the final fit of vomiting, that is, four hours after the time of first onset. The child at this time was in an exhausted condition, quite unconscious and exsanguined; the respiration was rapid, the pulse hardly discoverable and not to be counted. The next day some signs of improvement were apparent, but the conjunctivæ were found to be jaundiced. Several motions were passed, in one of which some bright blood appeared. The following day the child was able to take a few teaspoonfuls of barley water, and shortly afterwards commenced to make feeble efforts to take the breast. Jaundice became very marked, and the child remained very lethargic for some days, but at the end of a fortnight was apparently quite recovered. The treatment was almost entirely of the expectant nature. Small doses of T. Hamamelidis were administered, but reliance was mainly placed on external warmth, absence of constricting garments, and absence of internal irritation through the injudicious administration of nutriment.

I think this case presents features of physiological and pathological interest, which render it worthy of being recorded. In the first place, though hæmatemesis in the new born is not very infrequent, yet in my experience it does not usually occur so early in life, and is open to the probability that the blood has been derived from maternal sources, or is due to the administration of improper food. In this case these points are positively excluded. Secondly, the hæmatemesis and convulsions being coincident, and the subsidence of the latter on the occurrence of the former. Thirdly, the question arises whether the subsequent jaundice was an independent condition, simply a case of icterus neonatorum, or was it one of the same train of symptoms? The explanation I would venture is, that owing to want of vitality in the child when first born, perhaps, influenced by the chloroform administered to the mother, the lungs had partially retained their atelectatic condition, and consequently the circulation of the blood had not assumed its normal condition. The blood vessels of the lungs not receiving their proper amount of blood, the other organs of the body became congested. The convulsions were probably due to congestion of the brain, and ceased when that congestion was relieved, i.e., when the tension of the blood vessels was relieved through the rupture of some vessel or vessels in the stomach. The jaundice was caused through the congestion of the portal circulation. I think that the hæmatemesis in this case may be looked upon as an example of the effort nature oft-times makes to rectify wrong conditions, and it points a moral as to the line of treatment that should be adopted.

## NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castlereagh Street, Sydney.*

*\* \* Contributors can have their Papers reprinted and published in Pamphlet form, at Cost Price, if the necessary instructions are given to the Publisher at the same time the contributions are sent in.*

## AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, AUGUST 15, 1889.

## EDITORIAL.

### THE PRACTICE OF MEDICINE IN JAPAN.

We receive in exchange for the *A. M. Gazette* a medical journal which is the official organ of "The Sei-I-Kwai, or Society for the advancement of Medical Science in Japan." It is published monthly, one half being printed in English, the other in Japanese, an index for both parts is printed with each number in English. It is a most interesting publication, and no number is issued in which some article is not published in English, which is of special interest to medical practitioners of all countries; some of these articles are by European or American members of the Society, but the majority are by Japanese practitioners possessing European qualifications. The Society is managed by a committee of whom six are Japanese and three European or American gentlemen, the President being Kanehiro Takaki, F.R.C.S., Eng., Director General of the Medical Department of the Japanese Navy. The reports of discussions which take place at the meetings of the society are most interesting, and show such high professional acumen on the part of the practitioners taking part in them as to be a worthy example to similar societies in these colonies. Of the value of the Japanese portion of the journal we, unhappily, not possessing erudition in that language, are only able to judge by the titles of the papers read, subjects discussed or cases reported; but from this it is manifest that the Japanese prac-

titioner is possessed of high intelligence, and has an appreciative love for his profession. We have now before us the numbers for April, May and June of this year, and each Japanese portion contains upwards of a dozen original articles, reports of cases and discussions on medical subjects. Amongst them in the April issue appears, "Report of *post-mortem* of a case of Stricture of the Duodenum, by Y. Saneyoshi, F.R.C.S. England." "Treatment of Cancer by Ozone Water." "Phthisis from House Sweeping." "Intubation of the Larynx," also an extract from the *Government Gazette*, "Regulations relating to Apothecaries and to the preparation and sale of medicines."

In the May issue we find under "Proceedings of the Society," discussions on "Ulcer of the Leg," and on "Erysipelatous Vitaligo," with papers on "Clinical case of Aneurism with Autopsy," "Efficacy of a lotion of Antipyrin in Suppuration of the Anterior Chamber," "Treatment of Cholera."

In the same number are, under Proceedings of Society, "Discussions" on "Ascites" and on "Disorder of the right knee-joint," with papers on an "Examination of Oysters as to an endemic disease in Miura Gori, Usanagawa Ken." "Observations on Diphtheria," "Artificial Maturation of Cataract," on "The Therapeutic effect of washing out the stomach in diseases of infancy."

Our readers cannot fail to see that practitioners who feel such an interest in, and possess such knowledge of professional subjects as is exhibited by the foregoing examples, must be of high intelligence, and can only form part of a nation which possesses the attributes for national greatness. This is the more astonishing when we remember that thirty years since, with the exception of two or three ports, Japan was sealed against Europeans and their knowledge, and that all the progress which we chronicle has come about in the latter half of this period. The care which the Imperial Government of Japan takes for the protection of its people against ignorant pretenders in medicine is an admirable example to the Australasian Colonies; and as the present is an especially opportune time, there being either before the Legislatures, or in contemplation, Bills for the regulation of the practice of medicine in four of the Colonies, we republish the regulations in Japan, first, for the licensing of Physicians practising in that country; and, secondly, as to the education and examination of students of medicine:—

#### IMPERIAL DECREE No. 35.

Notice is hereby given that the Regulations relating to the licensing of physicians, as set forth in the articles hereunto annexed, are enacted and will be enforced on

and after the 1st day of the 1st month, 17th year of Meiji (Jan. 1st, 1884).

*Note.*—On and after the date of the enforcement of these Regulations, Notification No. 4 of the second month of the 15th year of Meiji, and the Imperial Decree No. 39 of the 8th month of the same year, will be cancelled.

By the command of H. I. M. the Emperor.

(Sealed) SANJO SANETOMI,  
Prime Minister.

YAMADA AKIYOSHI,  
Minister for Home Affairs.

The 23rd day of the 10th month, 16th year of Meiji (Oct. 23rd, 1884).

#### REGULATIONS RELATING TO THE LICENSING OF PHYSICIANS.

ART. I.—No person shall be permitted to practise medicine until he shall have passed the prescribed examination and obtained the necessary license from the Minister for Home Affairs.

*Note.*—The certificates of permission to practise medicine obtained previous to the passage of this act shall not be annulled by these Regulations.

ART. II.—Any person desirous of obtaining license to practise medicine, shall make application to the Home Department through City or Prefectural authority, such application to be accompanied with a certificate showing the grade to which the applicant obtained at his medical examination.

ART. III.—All who have obtained the certificate of graduation from the Medical School of the Government, as well as from city or prefectural schools, shall, at the discretion of the Minister for Home Affairs, be granted the license without passing the examination for medical practise.

ART. IV.—All graduates in medicine from foreign universities or other foreign medical schools in good repute, and all who have obtained license to practise medicine from foreign governments, shall, after the inspection of diplomas and certificates from such schools and governments, be admitted to practise without examination.

ART. V.—For any city or prefecture, when the number of physicians is insufficient to meet the needs of the population, provision shall be made as follows: The Governor or such city or prefecture, by actual inspection of the locality, shall submit a report of its condition to the Minister for Home Affairs, who thereupon, after a detailed inquiry into the course of studies of the applicant, and into the positions hitherto filled by him, may, at his discretion, grant to such applicant, without further examination, a temporary license to practise medicine in the aforesaid locality.

ART. VI.—A fee of three yen shall be paid on receipt of the license to practise medicine.

ART. VII.—The name as well as the residence of all who have obtained the license for medical practice, shall be entered in the medical register of the Home Department, and the same shall be announced to the public from time to time.

ART. VIII.—Any who, for any cause, wish to apply for a renewal of license to practise medicine, shall make application to the Home Department through the city or prefectural authority, such application to be accompanied with a statement of the causes which render a renewal necessary.

ART. IX.—A fee of one yen shall be paid upon renewal of license to practise medicine.

ART. X.—Upon the withdrawal from practice or the death of a physician, his license shall be returned to the

Home Department through city or prefectural authorities

ART. XI.—If a physician shall commit any criminal offence or unlawful act relating to his professional duty, his license to practise medicine shall, after due deliberation by the Central Board of Health, be suspended or revoked by the order of the Minister for Home Affairs.

*Note.*—The same regulations shall apply to all those offences which may have been committed before the license was granted.

ART. XII.—If in pursuance of Art. XI any physician is prohibited from practising medicine, the city or prefectural authority shall immediately take up his license and forward it to the Home Department, and if the sentence of suspension of license is passed, the said authority will endorse the period of suspension on the license, and, affixing the official seal to it, return it to the owner.

ART. XIII.—The prohibition from the practice of medicine may, after due deliberation by the Central Board of Health and at the discretion of the Minister for Home Affairs, be removed.

#### REGULATIONS FOR THE EXAMINATION OF CANDIDATES FOR LICENSES TO PRACTISE MEDICINE.

ART. I.—Those who wish to practise medicine shall be required to pass the examination in pursuance of these Regulations.

ART. II.—The Minister for Home Affairs shall hold examinations for licenses to practise medicine twice in every year. The place at which and the time when the examination is to be held shall be announced by the said Minister six months before each examination.

ART. III.—The Minister for Home Affairs shall, at the time of the examination, appoint an examining committee selected from the hospital physicians of the Government, city or prefectural establishments, or from among physicians or chemists whose medical knowledge is well known in the prefecture where they reside.

*[Note.*—In the case of the examination of a candidate for a license to practise dentistry, a dentist may be additionally appointed as a member of the examining committee.]

ART. IV.—The Minister for Home Affairs shall appoint a manager to superintend all affairs relating to medical examinations.

ART. V.—The examination for the license to practise shall be divided into two parts, provided the candidate is unable to take the whole examination at once.

*[Note.*—This article does not apply to candidates for examination for the license to practise dentistry. Such candidates must take the entire examination at one time.]

ART. VI.—Subjects of examination are as follows:—Examination for the first time:—(1) Physics; (2) Chemistry; (3) Anatomy; (4) Physiology.

Final examination for the last term:—(1) Theory and Practice of Surgery; (2) Theory and Practice of Medicine; (3) Materia Medica; (4) Ophthalmology; (5) Obstetrics; (6) Clinical Observations.

ART. VII.—Subject of examination for the practice of dentistry:—(1) Dental Anatomy and Physiology; (2) Dental Pathology and Practice; (3) Dental Medicines; (4) Dental Mechanics; (5) Practical Examination.

ART. VIII.—No one shall receive the first examination until he shall have pursued a course of study of not less than a year-and-a-half's duration, nor shall he receive the final examination until he has pursued an additional course of study of not less than a year-and-a-half's duration.

ART. IX.—Applications for examinations shall be forwarded to the prefectural authorities in the months of June and December of each year, accompanied by a detailed account of the studies prescribed for such examination; and all applications for the final examination shall be accompanied with a certificate showing that the first examination has been successfully passed. The prefectural authorities shall then forward all the necessary documents to the Home Department, and no application shall be forwarded after the 5th day of the month following the time appointed for forwarding the aforesaid applications.

[*Note.*—It is required that the detailed account of studies shall be attested by the professors or by two or more medical practitioners.]

ART. X.—When the prefectural authorities shall have found that the applicants have committed any criminal offence or any unlawful act relating to medical matters, the said authorities shall submit the fact to the Home Department, whereupon the Home Department, after due deliberation by the Central Board of Health, shall limit a certain period of time within which such applicants shall be prohibited from the examination.

ART. XI.—The questions to be asked shall be selected by the manager after consultation with the examining committee, and be shown at the examination room, and the answers to the said questions shall be given in writing.

[*Note.*—Under certain circumstances to be hereafter specified, the answers may be given orally.]

ART. XII.—At the conclusion of the examination the manager shall scrutinise all the examination papers, and shall immediately grant a certificate to all those who have passed a fair examination.

[*Note.*—The manager and the examining committee shall attest to such certificate.]

ART. XIII.—No candidate who, owing to his failure at an examination, has been refused a license, can apply to be re-examined until after a lapse of at least six months from the prior examination.

ART. XIV.—The applicants for the examination for license to practise medicine shall be required to pay the following fees:—3 yen for the primary examination for license to practise medicine; 5 yen for the past examination for the license to practise medicine; 5 yen for the examination for license to practise dentistry.

ART. XV.—Whenever the applicants, owing to sickness or any other cause, shall be unable to complete or attend an examination, the fees already paid shall not be refunded.

## LETTERS TO THE EDITOR.

### LARGE RENAL CALCULUS.

(*To the Editor of the A. M. Gazette.*)

SIR,—A short account of the *post-mortem* appearances in the case referred to in my last letter may be of interest to the profession, especially as the calculus, or rather calculi, collectively weighed not less than 1½ lbs. The patient, D.I.P., who was under the care of Dr. E. D. Mackellar, honorary surgeon, died in the Auckland Hospital on March 31st, 1889. He had previously had marked symptoms of renal calculus. The patient would not submit to an operation.

The *post-mortem* showed the kidney greatly enlarged. It measured 9½ inches in greatest length, and 2½ in greatest circumference. With capsule and adhering fat it weighed 4½ lbs. The kidney tissue was thinned and atrophied. On opening the kidney a quantity of purulent matter escaped. In the interior of the kidney was a large calculus and three small ones. The large stone was broken during removal and weighed 1 lb. 5 oz. The smaller stones weighed together 2½ ounces—giving a total of about 1½ lbs. The stone was white and glistening outside, and had evidently formed on a darker nucleus—"Fusible calculus." It was shaped like a greatly enlarged cast of the pelvis of a kidney. The smaller calculi were like flat water-worn shore pebbles.—I am, &c.,

THOMAS W. BELL,

M.B. & Ch. M., Edin.,

Resident Surgeon.

Auckland Hospital,  
July, 1889.

### HYDATID FLUID.

(*To the Editor of the A. M. Gazette.*)

MR. EDITOR,—I have just read in the *Australasian Medical Gazette* a communication entitled "Clinical Observations on Hydatid Fluid," by Dr. James Graham, and wish to direct attention to some further facts in connection with the same subject.

The author, in writing about the employment of the exploring needle, says: "That the presence of hooklets, or scolices, or brood capsules, under the microscope constitute in themselves absolute proof; but in many cases of genuine hydatids, microscopic research gives no additional help. This is specially true of the large number of cases that receive the name of *Acephalocysts*."

Without going too much into the details of the paper, which is very interesting, I desire to point out again (for I have done so years ago) that our investigations of Hydatid Fluid by means of the microscope fall short at the point above alluded to, because our investigations regarding the cyst itself and our acquaintance with its contents have not been so fully carried out as they might be. For we can go further in our diagnosis by the microscope than the evidence afforded by hooklets, or brood capsules, if we train ourselves by examining every Hydatid cyst and its fluid which we encounter. Take for example the brood capsules, these vary in almost every instance, some being found to be alive and seen oscillating on their pedicels attached to a fragment of Hydatid membrane, when examined in their native element recently withdrawn:—As happened to myself—a man who had been aspirated for a cyst, expressed his doubt as to the nature of his complaint, and his medical adviser told him to take the fluid which had been obtained to me, and get my unbiassed opinion. He came to my house (a distance of five miles) with the fluid kept warm in his pocket, and I showed him the capsules moving on their pedicels. This of course was an exceptional case; but I have noticed the same phenomenon in Hydatid Fluid obtained from a pulmonary cyst in a bullock which had been recently killed.

Now these brood capsules contain certain corpuscles, which having been found to effervesce under acetic acid, have been termed "cretaceous bodies," but they are not always so constituted, for in some specimens they exhibit internal changes when kept on a slide in glycerine and covered with a thin glass cover. Some have been noticed to take on a "cellular" structure, others have presented a series of laminations, representing in extreme miniature a laminated cyst.

Further changes I believe can be noted, to the ascertaining of which I desire to direct the attention of any who are like-minded as the author of the above named communication.

If such "capsule corpuscles" are met with in Hydatid Fluid, let them be subjected to the above process of cultivation, that they may, if possessing sufficient vitality, undergo some recognizable change, proving that they are minuter organisms of a Hydatid cyst.

These "capsule corpuscles" as we occasionally meet with them in Hydatid Fluid lying free from the capsules, are also occasionally to be met with in the sputum of pulmonary cysts which have been ruptured, and which, during their slow disintegration and discharge, give rise to Phthisical symptoms, giving occasion to unfavourable prognosis; but a fair acquaintance with their appearance may prove serviceable in arriving at a true nature of the case and a more favourable prognosis.

The author alludes to the poisonous action of the Hydatid Fluid when it appears to have entered the circulation after operative interference, or rupture of the cyst from violence. I am of opinion that these effects (nettle rash eruptions, &c.) are due to the fluid containing minute organisms, and their presence in the blood sets up irritation of various kinds. Two cases in time past came under my notice, in both of which there had occurred simple fracture of a lower extremity, and each patient died within a few days after the injury had been sustained from deep pulmonary congestion; and each case exhibited the presence of a large Hydatid cyst in the lung or liver, leading one to the conclusion that the congestion had been induced by the absorption of Hydatid Fluid from partial rupture of the cyst wall into the circulation.

I mention this that such cases should be very carefully examined as to the real cause of the congestion, and unless we are familiar with the minuter organic forms in Hydatid Fluid, we shall never be able to solve such a supposition as the above.

With regard to the effects of Hydatid Fluid extravasated into the peritoneal cavity, I furnished a paper on the subject which was published in the Victorian Medical Journal some ten years ago (I speak from memory, not having my notes by me), in which case an Hydatid cyst situated behind the liver was ruptured, and was followed by the development of the largest sized soft cancer mass I have ever seen, reaching from the involved edge of the liver down to the pubes, and which had been diagnosed as cancer long before death; but in the fluid which had been withdrawn from the abdomen somewhere near the umbilicus, and out of the cancerous mass itself I discovered undoubted derivations of a Hydatid, from which I unhesitatingly announced that there was Hydatid in some condition.

The P. M. examination led me to this conclusion that the highly vitalized element of the Hydatid had been grafted on the serous surface of the liver, and constituted the cancerous mass. In my diagnosis I never denied the possibility of a cancerous condition, but insisted on the presence of a Hydatid, leaving it to those who had seen the case in life to choose be-

tween the two conditions, Hydatid or cancer, or accept the view of the immediate co-existence of cancer and Hydatid. Subsequently, three or four cases (P. M.) were brought to my notice, showing the co-existence of the two diseases.

The subject is an important one from many points of view, and I am very glad to find so interesting a paper as the above in your journal, for there is much more to be accomplished in this field of investigation, and I trust that every case of Hydatid disease in all its forms will receive as full an examination with the microscope as possible.

Yours, &c.,

THOMAS SHEARMAN RALPH, M.R.C.S., Eng.  
(Carlton, Melbourne.)

On board S.S. to Brisbane, July, 1889.

#### TYPHOID FEVER.—COLD BATHING TREATMENT.

To the Editor of the A. M. Gazette.

SIR—It is disappointing to read Dr. Hare's paper in your July issue in favour of the Cold bath treatment for typhoid. As the paper was to be written as a talisman, our expectations were raised to see a scholarly statement in defence of the plan of treatment, making plain the philosophy of the why and wherefore, and explaining the physical and the physiological actions induced, and the issue of their success. The doctor fences the question with a tentative argument. It must be *the* treatment because the hospitals in E. Australia which do not use it have, with one exception, a higher deathrate than the Brisbane Hospital, which does use it. The paper reveals a few weak points. The Coast Hospital has a lower percentage of deaths than the Brisbane Hospital. Many hospitals and practices in hospitals and dispensaries in Europe and Australia have a still lower deathrate, and do not use the bath. The doctor ingeniously strives to reverse the deathrates of the Coast and Brisbane Hospitals for 1888. He wishes to alter the facts, making—

The Coast Hospital deathrate 6.9 per cent.

Brisbane " " 5.7 per cent.

Let us have facts as they are—

The Coast Hospital deathrate 6.2 per cent.

Brisbane " " 7.18 per cent.

In the 1888 Report of the Brisbane Hospital a lower per cent. is estimated, but that was obtained by considering all the cases remaining under treatment as if cured. In Dr. Hare's two-and-a-half years' estimate, where the 17 still ill are not included, the deathrate by the doctor's own showing is 7.0 per cent.

It is unfair, excepting to examine contributory influences and causes as such, to seek to traduce the deathrate to a lower than actual percentage. The efficiency of an institution is in its success under difficulties, not in its power—so to speak—of good luck. If Dr. Hare is justified in reducing his deathrate to 5.7 per cent. by putting on one side, as if non-existent, the cases which die within two or three days, &c., &c., then he is equally justified in putting aside those with weak constitutions, those suffering from other than typhoidal lesions, and—even as a fatalist—those whose time had come to die. By thus fencing the deathrate can be traduced to a mere nothing per cent., but it gives us no means of judging the real success of the treatment in difficult cases.

Hospitals must take their share of bad cases. The Coast Hospital received cases late, and even moribund, and yet it had a lower deathrate than the Brisbane Hospital. Have the positions of the two hospitals in a sanitary view, and the improved wards and nursing, &c., nothing to do with the lowered deathrate? Brisbane

Hospital is two miles out of town. By being well whipped up in advertising laudatory commendations by the daily Press, the ice-bath treatment is so puffed up as to have led all classes immediately to send their sick fever cases to the Brisbane Hospital. Only a few (and those probably lodge patients?) are sent in in a moribund state. On the other hand numbers of respectable people—not too well-to-do—try remedies and consult chemists, so as to save a doctor's bill; and thus the private practitioner gets the cases later than does the Brisbane Hospital. That this is so, not only in typhoid cases, but as a generality is fully verified in my own experience. During the last four months I have had three deaths.

1.—W. G., aged 59; liver complications; seen twice; had been for some weeks in Brisbane Hospital, but was sent out against his will—to die.

2.—E. E. Y., aged 15 months; mesenteric disease; moribund when brought.

3.—M. A. W., aged 9 days; paralytic convulsions from sub-luxation of neck in birth (attended by mid-wife). Thus to seek to exonerate any single hospital, and especially the Brisbane hospital, of its percentage death-rate, because of a number of bad cases, is to institute unfair and misleading comparisons.

Dr. Hare's statistics verify the fact that treatment of disease by violence is unjustifiable and unscientific. During the last part of the expectancy period, he tells us the deaths from perforation or hæmorrhage were rather over one-third the total deaths, 24 in 68, or 35.29 per cent. But in the two years-and-a-half, bath treatment, 41 deaths out of 77 occurred from perforation or hæmorrhage, considerably over one half, or 53.24 per cent. By the old system 27 should have died from these lesions, the direct effects of the typhoid virus, by the bath treatment 41 died. I saw a patient suffering from a sub-acute or influenza type of typhoid fever. He had been suffering for some time, but though not able to work, was not ill enough to keep his bed. At the end of a week all bad symptoms had disappeared, and I thought, perhaps, the case had been wrongly diagnosed. He went to the country for a change. On his return, in a week or ten day's time, he got wet through, remained in his clothes and was taken with a relapse. Owing to poverty his friends sent him to the hospital. He was treated with ice-baths, and in less than a week lay wasted and dying from hæmorrhage. Thus in weak cases and where intestinal congestion is severe, Dr. Hare has proved that ice-baths act by violently causing hæmorrhage or perforation to such a degree as to affect fatally in direct typhoid issues, a higher percentage of the total death-rate, probably than has been attained by any other treatment known. And the admission he makes is much more serious. In seeking to traduce the death-rate among women, under the bath treatment, he gives statistics which clearly show that three women died, not from typhoid, but from abortion ending fatally through hæmorrhage or septicæmia, caused by the violence of the ice-baths. He does not tell us how many, if any, aborted and recovered. This statement accuses those responsible of malpractice and criminal assault, in three deaths by direct violence to pregnant women. Further he allows it to be gathered from his remarks that the physicians themselves dare not give it in other cases *contra-indicated*. Dr. Hare does not attribute pneumonia, or pneumonia deaths to the bath treatment.

Yet in 1888 the Brisbane hospital report gives:—  
*Pneumonia*.—17 cases cured or relieved; 12 cases died; an average death-rate of 41.37.

*Phthisis*.—75 cases cured or relieved; 38 cases died; 15 remaining in hospital; an average death-rate of 33.62.

*Diseases of Liver*.—31 cases cured or relieved; 9 cases died; 1 case still in hospital; an average death-rate of 24.39.

*Peritonitis*.—6 cases cured or relieved; 7 cases died; an average death-rate of 53.11.

*Dysentery*.—22 cases cured or relieved; 6 cases died; an average death-rate of 21.42.

*Diarrhœa*.—16 cases cured or relieved; 2 cases died; an average death-rate of 11.11.

A glance will show that all the above are lesions, which are ever appearing in typhoid fever cases. How marvellous that there should be such a number of cases in the hospital, concurrent with the typhoids and with such an epidemic mortality, and, yet, not even in typhoid patients! But when we look at the percentage of deaths, the coincidence is more marvellous still:

*Peritonitis*.—53.11 per cent. deaths.

*Pneumonia*.—41.37 per cent. deaths.

*Phthisis* (? presumably all chronic chest ailments).—33.62 per cent. deaths.

*Diseases of Liver*.—24.39 per cent. deaths, &c., &c.

One gentleman—who had been behind the scenes—asked me if I had been able to discover the number of deaths from typhoid lesions, and entered in those separate classes, other than typhoid, the typhoid being considered cured? A few days ago, a brother of a Friendly Society was asked to visit an almost friendless brother, a stranger, in the Brisbane Hospital. He was in one of the Chest Diseases Wards. He made numerous complaints. It appeared that he had been a strong, athletic man. Nothing ailed him until his admission some weeks before with typhoid fever. He was treated with the ice-baths. He was cured (?) of the fever, but sent down to the chest diseases ward to die! In complaining to the visitor that the place was being made uncomfortable, that it was manifest his room would be preferred to his company, he was advised to make formal charges. "It would only make matters worse," said the man. "You see that funeral going out. I am expecting mine every turn!" Before the next week a brother-in-law had taken him to the country in a forlorn hope.

In my practice I have had several patients with lesions, sub-acute and chronic, of the chest and liver, caused by the bathing system in the Hospital. Numbers of cases with swollen legs, varicose veins, &c., have to wear elastic stockings after the bathing treatment. Cases treated in private practice with ice-baths often get pneumonia, or the sub-acute congestion to which typhoid tends. Where, then, is the *écoté* of removing one disease by inducing others, which with stealthy, subtle tread undermine or shatter the constitution, cripple the strength of the life-powers, and too often shorten the patient's life?

In the name of humanity, in the interests of medical science and skill, I protest against the violent treatment by ice-baths. What odds to me, how many great German guns approve. I must follow my own judgment and common sense. Practitioners who won't dare to do likewise, ought to go to Germany.

Look at the treatment scientifically. Does it not stand to reason, on all known law, that a chill to the skin drives the blood to the viscera? Is not retarded circulation in the viscera the initiatory of visceral congestions? Is not the sudden chilling a *severe* shock to the nervous system? Has not the bath to be given again and again to bring down the temperature, ever *re-rising* in Nature's reaction? Are the germs killed, when cases go on for weeks and months uncured? "But," says Dr. Hare, "we do not (now) give ice-baths. We get the Enoggera water, 78° or 80° and cool it with ice to 60°—a pleasant bath-heat!" If so, be consistent,



Underground tanks would keep the water at 60° or even lower. Build some tanks or wells and save the £294 14s. 10d., years' ice-bill for ice to reduce the tap-water. Patients have been kept in till blue and insensible, was this in water at 60°?

How about contagion? Patients are not allowed to see friends for fear of contagion, yet the bath (because ice is dear) has been wheeled from patient to patient for them to be bathed in the same ice-water! Does the ice or iced-water kill the germs? If so, what a grand disinfectant!—not for patients' bodies, but for their linen, bed-clothes, &c.

My communication is already too long. I shall be pleased next month to contribute notes of a different treatment.

Meanwhile I am, &c.,

THOMAS P. LUCAS,

M.R.C.S.E., L.M. and L.R.C.P. Ed., L.S.A. Lond.  
Ann-street, Brisbane, August 2, 1889.

#### WHAT WAS THE CAUSE OF DEATH?

(To the Editor of the A. M. Gazette.)

SIR—I recently saw an account of an inquest in a country paper which puzzled me a good deal. The inquest was on the body of a woman, and the evidence showed that deceased was pregnant, within six or eight weeks of her confinement, and of sober habits. All the witnesses but one deposed that deceased took no medicine, but the one stated that on the Tuesday previous to her death she took some for a cold, and that she then complained of a pain in her back and across her chest. The evidence, generally, shewed that on Thursday the deceased began to vomit at about 3 p.m., but was better towards 5 p.m., and had a good night. On Friday she was again taken ill with a pain in her stomach and vomiting at about 6 p.m. She had taken nothing since the previous Sunday—on account of the retching—but milk and water; she, however, did not keep her bed till Saturday, when she had a dose of castor oil in the morning; ceased retching at noon, was apparently dead up to the knees at 6 p.m., and died at 11.45 p.m. No doctor saw deceased during her illness, two were wired for but were busy. The medical evidence was that there was no need for a *post mortem*, but that from a superficial examination of the body, and from the evidence, he was able to state that the cause of death was "Paralysis owing to overstraining of the stomach, and womb-disturbance in consequence of pregnancy, the womb being paralysed first. It is not unusual for deaths to result from the causes I have stated." The jury brought in a verdict of death from natural causes, to wit, "paralysis of the womb." Now, Sir, I may be exposing my ignorance, but I must confess that I do not know what "paralysis of the stomach and womb" means; perhaps some of your readers can enlighten me. As far as I can see, the death might have resulted from several different causes, and I should say that irritant poisoning was one of them. It is, however, difficult to give a diagnosis from such scanty evidence.—Yours, &c.,

C. G. THORP,

M.B. et Ch. M., Edin.

Milton, N.S.W.,

July 11, 1889.

[A *post mortem* should have been made, without which it is impossible to say what was the cause of death, which, in our opinion, is not satisfactorily accounted for by the medical evidence.—Ed. A.M.G.]

#### THE REGISTRATION OF DEATHS IN NEW SOUTH WALES.

(To the Editor of the A.M. Gazette.)

SIR.—In vain have we been waiting that this member or that member of parliament would bring successfully forward a satisfactory Medical Bill, but, alas, without result, and the medical profession of New South Wales remains a laughing-stock for the rest of the medical world, as I will presently show, and so difficult is it at the present time to distinguish a qualified from an unqualified man, that instances are not wanting in which quacks have met medical men in consultation, and have even bought practices or exchanged them under pretence of being qualified.

Under the present circumstances the Government are recognising on an equal footing the diagnosis of medical men and quacks with their rank and file of charlatans, impostors, &c.

The part of the colony I reside in is specially infested with quacks, and since I learned that they were allowed to supply death certificates I wrote to the Registrar-General, asking, since quacks were allowed to supply death certificates with the causes stated, whether he really required me any longer to state the causes on certificates supplied by me. He did not reply to this, and I, taking silence as consent, supplied my next certificate with cause omitted. This the local registrar refused to accept, and so I made this a *casus belli*. I wrote to the Registrar-General pointing out the absurdity of him expecting me or any qualified medical man to supply the causes on death certificates, because by so doing we would be misleading the public, inasmuch as the certificates supplied by medical men were used in conjunction with those from quacks to compile statistics, really boxing, as it were, reliable with unreliable data and publishing them in good faith to the public as reliable statistics.

I suggested to the Registrar-General that it would be easier, better, and less expensive if he were to simply instruct the officers of his department to get the number of deaths, and to guess the causes and publish them as the guessed statistics for such and such a year, they then would be reliable as far as they went. I append his reply for publication.

The absurd part of this is that the Board of Health are even using these statistics to build up extensive reports and drawing therefrom conclusions (sic).

I would now suggest to the medical profession of New South Wales an easy way of overcoming present difficulties, independent of a Medical Bill, and thereby holding a more dignified position than we do at present, and, I submit, if the legal profession had such an opportunity of ridding certain disabilities they would readily grasp it, and that is requesting the Government to instruct the Registrar-General and his officers to receive death certificates *with causes filled in* only from duly qualified medical men, and certificates from unqualified men to have the causes marked *unknown* or *uncertified*. This would suit all parties, and the public would soon be able to detect the impostors; and, if the Government refused this, or the medical profession to take a determined stand, and refuse to supply the causes of death, and, in the interests of the public we are entitled to do so on account of the apathy of the Government, the result would be obvious, and we would succeed—as is partly shown in the Registrar's letter herewith. Trusting you will, Mr. Editor, take the matter up, I am,

E. J. A. HAYNES, L.R.C.P., Lond. M.R.C.S., Eng.  
Gunnedah, N. S. Wales, 3rd June, 1889.

Branch for Registration of Marriages, &c.,  
Registrar-General's Department,  
Sydney, 22nd May, 1889.

SIR,—I have to acknowledge receipt of your letter of 16th instant, on the subject of medical certificates as to cause of death.

This question has been under my consideration for a considerable time.

To my mind it is beset with difficulties.

However, I intend from the beginning of the ensuing quarter to shew on the Returns the various causes of death accounted for by those who do not hold a duly accredited diploma.

In all cases where medical men refuse to certify as to cause of death, I must instruct my Registrars to report such to the Coroner, or other officer of the district whose duty it is to make inquiry.

I am, Sir,  
Your obedient Servant,  
E. G. WARD,  
Registrar General.

E. J. A. HAYNES, Esq., M.R.C.S.,  
Gunnedah.

[No good can be done by the introduction of a Medical Bill by any private member. It is essentially the duty of the Government to act on the recommendation of the Select Committee of the Legislative Council on the regulation of the practice of medicine and surgery in New South Wales, and by the passage of a Medical Bill to protect the people from the imposition and fraud shown by this Committee to be so rampant here.

As to the registration of deaths, we refer our correspondent to the report of a previous Committee of the Council who made enquiry into this subject, and also to a bill founded on its report introduced by the Editor.—Ed. A.M.G.]

#### AN INTERESTING SUIT FOR NULLITY OF MARRIAGE.

N — v. C —, FALSELY CALLED N —.

This was a suit by the husband to obtain a decree of nullity of marriage on the ground that the respondent was unable to consummate the said marriage by reason of her malformation. The case was heard *in camera* at the Supreme Court, Sydney, on March 15, 1889, before His Honor Mr. Justice Windeyer, and as it is one of great interest in medical jurisprudence, we have gone to some trouble to obtain the considered judgment delivered by His Honor on the 26th March, which analyses the evidence given by the medical witnesses, and we now publish the same in full for the benefit of our readers. His Honor said:—

"This is a suit for nullity of marriage instituted by the husband against the wife on the ground of her alleged incurable malformation and bodily defect, rendering consummation of the marriage impossible. As the case is one of an unusual character, and the first of the kind in this Court contested by the parties to it, I thought it right to reserve my judgment in order that I might consider the decisions bearing on it and the evidence given before me, especially that of the three very able medical gentlemen who have been called as experts.

It appears from the evidence that the parties were married on the 28th February, 1886, and that after their marriage they went on a wedding tour which lasted about three weeks or a month. Since then up to January, 1888, when the respondent left her husband for the purpose of undergoing a course of medical,

treatment by Dr. Chambers, they have lived together except during such absences on the part of the husband as were necessitated by his employment as a relieving station-master on the railways of the colony. During the various periods of his cohabitation with the respondent, commencing immediately after his marriage, the petitioner states that he has made repeated efforts to have connection with the respondent, but has always been unable to do so. The cause of this failure, I find, as a matter of fact, after hearing the evidence of the parties, lies entirely with the respondent, and is in no way attributable to any want of sexual power or desire on the part of the petitioner. In fact, the evidence of the petitioner and of Dr. Fiaschi convinces me that the petitioner has been compelled to bring his suit on account of the nervous illness and exhaustion brought about by ungratified sexual desire and his wife's inability to satisfy it, Dr. Fiaschi stating that the mental excitement of the petitioner from this cause led him to fear mental derangement might be induced. Of the *bona fides* of the suit, therefore, I have no doubt whatever. The question, consequently, for determination is whether the inability of the petitioner to have connection with his wife arises from incurable physical defect in her.

It appears that two or three years previous to her marriage, the respondent, who was then about 20 years of age, was taken by her mother to Dr. Eichler, as she never had any monthly courses. This gentleman, who has given evidence, stated that upon examination he found her uterus very small and undeveloped, and it appearing to him that there was no natural opening to it he made an incision to produce one where it usually is. He further stated that he could find no ovaries.

After her marriage it appears that the respondent was still without any monthly courses. From the evidence of the husband, it further appeared that whenever he attempted to have connection with her, the respondent showed strong aversion to the sexual act, and violently resisted the petitioner by pushing him away and shrinking from him and thus preventing him from having intercourse with her. Being utterly unable to have connection with her, and his health suffering in consequence from suppressed and disappointed sexual passion, he consulted Dr. Fiaschi. The case being apparently an obscure one, that gentleman requested the petitioner to bring him his wife, which he did. Upon examining her, Dr. Fiaschi stated that all the obscurity in the case vanished. He found that the respondent's vagina was extremely small, that the uterus was of an infantile development, and that the woman had no ovaries so far as he could discover. He further came to the conclusion that the respondent suffered from a peculiar spasmodic disorder of the muscles of the vagina, known as vaginismus, which prevents coition. This disorder appears, from the evidence, to be one arising from the absence of sexual desire, doubtless originating in imperfect sexual development, and evidences itself by aversion to the sexual act, and a physical contraction of the vagina which makes coition impossible without violence. This opinion was corroborated by that of Dr. Scot-Skirving, who, as an expert, heard the evidence given in Court, and had considered the reports of Dr. Fiaschi and Dr. Chambers, the officially appointed examiners. It appeared from the evidence that after her examination by Dr. Fiaschi, the respondent was examined by Dr. Chambers who, upon seeing her, at once said, "If you had come to me before marriage, I should have told you to stand aside." He said, however, that he would try an operation to enlarge the vagina so as to make sexual intercourse possible, so that the parties might,

to use his expression, "live together in some sort of comfort." All these three medical gentlemen, standing in the first rank of their profession, seemed to be agreed, as it was, indeed, admitted by counsel at the hearing that without an operation connection with the respondent was physically impossible on account of the unnatural smallness of her vagina, both in depth and circumference. The respondent's case, in answer to this evidence, was that the operation which Dr. Chambers performed upon her had cured her of the physical inability for connection from which she had suffered.

In support of this contention Dr. Chambers gave evidence to prove that by a course of treatment of a mechanical kind the orifice to the vagina had been considerably enlarged, and his evidence was relied on as shewing that it was now possible for the petitioner to have sexual connection with her. He did not dispute that at one time there had been vaginismus to a certain extent, but he was of opinion that the vagina having been enlarged, vaginismus would no longer exhibit itself, as he saw no sign of it when the patient was under examination. He further was of opinion that the infantile and imperfect development of the uterus, to which he said there was a small natural orifice, would improve with cohabitation, and he relied upon his actual experience in two cases as corroborating his opinion.

However unpleasant it is to have to dwell upon questions of this sort, the duty is cast upon me of deciding what is the kind of sexual intercourse of which a woman must be capable, and what sort of sexual intercourse a man has the right to look for in marriage.

It appears to me that upon this point the views of Dr. Lushington, as expressed in the course of *D—e v. A—g* (1. Robertson's Eccl. Rep. p. 298), are founded upon the considerations which ought to govern the decision of such a question. "I apprehend, therefore" (he says), "that we are all agreed that in order to constitute the marriage bond between young persons, there must be the power present or to come of sexual intercourse. Without that power, neither of two principal ends of matrimony can be attained, namely, a lawful indulgence of the passions to prevent licentiousness, and the procreation of children according to the evident designs of Divine Providence. Though all are so far agreed, this unanimity of opinion does not remove the existing difficulty, for that difficulty lies in the meaning of the term 'sexual intercourse.' How is it to be defined? This is a most disgusting and painful inquiry, but it cannot be avoided."

"Sexual intercourse, in the proper meaning of the term, is ordinary and complete intercourse; yet I cannot go the length of saying that every degree of imperfection would deprive it of its essential character. There must be degrees difficult to deal with; but if so imperfect as scarcely to be natural, I should not hesitate to say that, legally speaking, it is no intercourse at all. I can never think that the true interest of society would be advanced by retaining within the marriage bond parties driven to such disgusting practices. Certainly it would not tend to the prevention of adulterous practices, one of the greatest evils to be avoided."

Admitting, as everyone does, the high professional character and great skill of Dr. Chambers in cases of this sort, and granting that he has improved the state of the respondent from one of complete incapacity for coition, to one which he contends does admit of it, the question which I have to decide is whether, looking at all the circumstances of the case, the state of the unfortunate respondent is such that, however much she

is to be pitied, I can compel the petitioner to take her as his wife. Does the evidence shew what Dr. Lushington calls "ordinary and complete intercourse," under such conditions as normally constituted healthy men and women enjoy it, to be possible, or only some intercourse so imperfect as scarcely to be natural? Even taking the optimist view of Dr. Chambers, who argued it with the pardonable enthusiasm of an able expert, it seemed to me that, at best, he looked forward, not to the ordinary and natural intercourse that takes place between healthy men and women, but to a makeshift sort of a connection, to be put up with because, as he said when he first interviewed the parties, "They were married, and must make the best of it." In answer to the plain question put by her counsel, "Was the woman capable of having connection?" he said, "Define what you mean by connection and I will answer your question." The doubt implied in the answer is much the same as if a man, being asked whether a woman was chaste and a virgin, should reply, "Define me chastity and virginity, and I will tell you." The coition which he said would be possible would, he further intimated, require certain judicious sexual management and excitement, and even thus, the act of coition, he said, would only be possible on the assumption that there was sexual sympathy between the parties. I ask in respect to this evidence, as Lord Fitzgerald asked with reference to similar evidence in the case of *G. v. M.* (L.R. 10 Appeal Cases, p. 207), "Is this the kind of capacity which a man expects in a woman whom he is making his wife? I ask in the interest of morals is this the sort of wife who can be expected to retain the affection of her husband and to keep him from intercourse with other women?" With reference to the sort of possible connection to which Dr. Chambers looks forward as eventually possible, the remarks of Dr. Lushington in *D. v. A.* (1 Robertson's Eccl. Rep. p. 299) are most pertinent.

"When," says he, "the coitus itself is absolutely imperfect, and I must call it unnatural, there is not a natural indulgence of natural desire; almost of necessity disgust is generated, and the probable consequences of other connections with men of ordinary self-control become almost certain. I am of opinion that no man ought to be reduced to this state of quasi-unnatural connection and consequent temptation, and therefore I should hold the marriage void."

Admitting that the onus of proving inability lies upon the petitioner, this evidence, advancing everything that can be said by a professional expert ably and warmly espousing his patient's cause, fails to shake my belief, founded upon the other evidence in the case, that the respondent is physically incapable of coition.

Dr. Fiaschi and Dr. Scot-Skirving are both of opinion, looking at all the evidence in the case, that even supposing the respondent's vagina to be now large enough to admit of entrance by the male organ, the vaginismus from which the respondent suffered is not likely to have been cured, and their opinion is evidently founded upon the imperfect sexual development of the woman. Dr. Chambers himself says that the possibility of such sexual intercourse as he thinks may be possible, entirely depends upon the presence of sexual sympathy. The character of vaginismus apparently is such that though the woman's vagina may be sufficiently large to admit a medium-sized speculum, it may be utterly impossible to have connection with her. Though she may submit to the insertion of a speculum without flinching, Dr. Chambers admits that even in such cases the slightest attempt at intercourse has been known to cause the introitus vaginæ to shut up "as if held by a clamp" (to use the words of a medical work of repute

cited at the hearing). The evidence, moreover, shews that whatever alteration in the size of the respondent's vagina may have been effected by Dr. Chambers' operation, she still evinces that repugnance to sexual intercourse which is characteristic of vaginismus.

It appears that after the respondent left the hospital in which she underwent treatment by Dr. Chambers, she went to Rydal, where her husband attempted to recommence cohabitation with her. On his reaching at night the railway station near her father's house, he received a note from his wife saying that her father would be at the train and would show him a room. On getting, however, to her father's house, which was close to the railway, he found it locked up, and, being unable to gain admittance, he was obliged to go on to the next railway station, and there pass the night. When he returned the next morning and saw his wife, she said, "You had better go and see my father and make a settlement with him for so much a week. I will never live with you again." The petitioner then asked her if she would not see him at their own house, which was close by. To this she replied, "What is the use? I am not going to live with you any more." The petitioner then told her that he wanted to get some things out of the house, but that as the door was locked he could not get them. The respondent then went for the key, but, on returning with it, brought her two sisters, one a grown woman, the other a girl of twelve, with her, thus showing her determination not to be alone with the petitioner. All this convinces me that the respondent, whose face, though prepossessing, bore a curiously infantile expression, had no more sexual feeling after the operation than she had before. Though she swears that she has it, I place more reliance upon her conduct as evidence of her feelings than upon her bare statement in the witness box. The repugnance which she showed to the attempted embraces of her husband, instead of diminishing, has become so intensified that she refused to live with him, and would not even trust him to be alone with her. Conduct such as this, is, to my mind, conclusive proof of the absence of all the womanly tenderness and complaisance which, founded in sexual instinct, create the mutual sympathy in passion which is a bond of love, and without which, Dr. Chambers admits, sexual congress would be impossible. So far from there being any evidence that the physical symptoms of vaginismus have disappeared, it would seem that there was superadded to physical repulsion an aversion to the very presence of the husband.

The suggestion on the part of the respondent that the petitioner has brought his case too soon, and that he should be compelled to return to cohabitation till a full period of three years has expired before he is allowed to prosecute his suit, arises from a misconception of the doctrine of triennial cohabitation. Dr. Lushington, in *U. v. F.* (2 Rob. Ecc. Rep., p. 618), says:—"I am of opinion that triennial cohabitation is not an absolutely binding rule. It is a convenient and fitting rule, and one not to be departed from on slight ground; still, circumstances may arise, as in the present case, to justify the Court in dispensing with it. I am not aware that there is any magic in three years. I conceive that the object of the rule is to provide that sufficient time may be afforded for ascertaining, beyond a doubt, the true condition of the party complained of."

This view of the law is adopted by Lord Selborne and Lord Watson in the case of *G. v. M.* (L.R. 10 App. Cases), and also in the case of *D. v. F.* (84 L.J. P. & M. 70), where the Judge Ordinary says:—"There remains the rule as to triennial cohabitation. This rule only applies when the impotency is to be presumed from continual non-consummation. For when the impo-

teny is plainly proved *aliunde* the Court has never resorted to it. The present case falls rather within the latter class. For if I may rely upon the petitioner's oath, the impotency is beyond a doubt; and if I cannot rely upon her oath, I shall have no better ground for doing so by putting her to repeat the same story at the end of another 18 months' cohabitation. The Court therefore pronounces her marriage void."

It is true that to entitle the petitioner to a decree, the impediment in the way of intercourse must be physical, and must not simply arise from the wilful refusal of the wife to submit to her husband's embraces; but in this case I am satisfied that the refusal of the respondent to consort with her husband as his wife arose from her continuing vaginismus. As the Judge Ordinary says in the case of *G. v. G.* (40 L.J. P. & M., p. 85):—"I see nothing in the evidence tending to show that if they were to renew cohabitation there would be any difference in the state of things that has existed during the two years and ten months of the previous cohabitation. Under these circumstances I think that, taking a practical and reasonable view of the evidence, and freeing the case from technical rules as far as I reasonably can, the consummation of the marriage is practically impossible. No one can dive into the future and say that no change may hereafter take place in the woman; but the same remark applies even to a case of structural deformity. No one knows what may happen for unforeseen things happen daily."

If the parties in this case continued to live together after the wife's treatment by Dr. Chambers, and the respondent had persistently refused to allow her husband to even attempt connection with her, the Court would be quite justified in coming to the conclusion that her refusal arose from incapacity. As Sir James Hannen, the distinguished Judge who now presides over the English Divorce Court, says in *S. v. A.* (47 L.J. P. & D. 76): "Recent cases establish this in advance of previous decisions, that where a woman is shown not to have had intercourse with her husband after a reasonable time for consummation of the marriage, if it appears that she has abstained from intercourse, and resisted her husband's attempts, the Court will draw the inference that that refusal on her part arises from incapacity."

The inference is none the less strong when the wife refuses to live with her husband at all, and, as in this case, will not even trust herself with him alone.

Whatever the wife may swear about her having sexual feelings, if indeed she knows the significance of the expression (which I doubt), everyone acquainted with the facts of the case would say that she would be committing a most grievous wrong upon a man if, freed from the tie of this marriage, she should accept another offer of marriage without fully explaining to the man offering to marry her all the facts connected with her first attempt at married life.

With all pity for the unfortunate respondent, I feel that I should be doing a great wrong to the petitioner and taking a course which must inevitably lead to the unhappiness of both parties, if I refused to grant him the decree which he prays. If the respondent has any regard for the petitioner she will, sinking all selfish considerations, with whatever grief she may feel for the loss of her status as a married woman, acquiesce in the justice of a decree which, if it were other than it is, would not only entail a life of misery upon the man whom, when marrying, she professed to love, but would necessarily bring sorrow upon herself.

In accordance with the conclusion at which I have arrived, upon the facts of the case, I pronounce the marriage null and void, and grant the decree as prayed for, to take effect in three months."

## BOOK NOTICES.

**HANDBOOK OF THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE THROAT, NOSE, AND NASO-PHARYNX.** By Carl Seiler, M.D., Instructor in Laryngology and Lecturer on Diseases of the Upper Air Passages in the University of Pennsylvania, and Chief of the Throat Dispensary of the University Hospital. Third edition, with two coloured plates, and 101 engravings. 373 pages. Philadelphia: Lea Bros. and Co., 1889. Sydney: L. Bruck. Price, 10s. 6d., by Post, 11s. This work, which has now reached its third edition, is intended to serve as a guide to students of laryngoscopy in acquiring the skill requisite to the successful diagnosis and treatment of diseases of the larynx and nasopharynx. It contains a short history of the laryngoscope, with a description of it and of the reflector and the various kinds of light used, as well as a concise account of the proper manner in which an examination of a patient's larynx and nose should be conducted. Two chapters are devoted to the Anatomy and Physiology of the Larynx and Nose, and all the disorders of these organs, including, "Functional Disorders of the Larynx," "Laryngeal Neoplasms," "Atrophic Nasal Catarrh," and "Hay Fever," are intelligently summarized, while "Catching Cold," "Clergyman's Sore Throat," "Laryngitis Phthisica," "Chronic Nasal Catarrh," and "Tumors in the Nasal Cavities," are adequately treated and embody many original views and valuable suggestions. At the end of the volume will be found well and correctly arranged tables, based upon carefully kept records of over 1,000 cases treated by the author, and we may safely say that this handbook will be read throughout with pleasure and profit by all those who have not the time or inclination to study the more exhaustive treatises on these subjects.

**ELECTRICITY IN THE DISEASES OF WOMEN,** with special reference to the Application of Strong Currents. By G. Betton Massey, M.D., Physician to the Nervous Department of Howard Hospital; late Electro-Therapist to the Philadelphia Orthopædic Hospital and Infirmary for Nervous Diseases. 37 illustrations. 210 pages. Philadelphia: F. A. Davis, 1889. Sydney: L. Bruck. Price, 8s., by Post, 8s. 6d. The author believes this to be the first attempt at a complete treatise on the electrical treatment of the diseases of women, and he certainly has succeeded admirably in giving a concise, clear, and fair statement of the theoretical and practical value of electricity. The first chapters are devoted to an able exposition of what may be called the

physics of electricity, a knowledge of which is essential for the intelligent application of this useful but also—if not well regulated—dangerous form of treatment. In Chapter V. he begins with the proper aim of the work, viz., "Intra-Uterine Galvano-Chemical Cauterization," followed by operative details of Pelvic-Electro-Puncture; the Faradic and Franklinic Currents in Gynæcology; Non-caustic, Vaginal, Urethral, and Rectal Applications; the electrical treatment of Fibroid Tumors of the Uterus, Uterine Hæmorrhage, Chronic Endometritis, Subinvolution, Hyperplasia, Pelvic Indurations and Pain, Uterine Displacements, and Extra-uterine Pregnancy. The book in every respect is a model, and should be a great help to the large number of general practitioners and specialists who are beginning to use electricity in their practice.

**PRINCIPLES AND PRACTICE OF DENTISTRY,** including Anatomy, Physiology, Pathology, Therapeutics, Dental Surgery, and Mechanism, etc. By Chapin A. Harris, M.D., D.D.S., late President of the Baltimore Dental College, author of "Dictionary of Dental Surgery." Twelfth Edition. Revised and edited by Ferdinand J. S. Gorgas, A.M., M.D., D.D.S., author of "Dental Medicine;" Professor of the Principles of Dental Science, Dental Surgery and Dental Mechanism in the University of Maryland. One full-page plate, and 1,028 illustrations. 1,222 pages. Philadelphia: P. Blakiston, Son and Co., 1889. Sydney: L. Bruck. Price, 32s., by Post, 34s. This standard work on the principles and practice of dentistry, which has been the principal text-book in all dental schools for the last forty-eight years, has now reached its twelfth edition, and shows a great advance over its immediate predecessor. It contains some 226 pages more than the previous edition, and comprises all the later phases of dental progress in principles and practice; moreover, 382 illustrations have also been added, and considerable changes made in the general arrangement of subjects. The great value of this well-known text-book is so universally recognised that no words of commendation on our part need be said.

**THE STUDENTS' TEXT-BOOK OF THE PRACTICE OF MEDICINE.** By Angel Money, M.D., Lond., Assistant Physician to University College Hospital, and to the Hospital for Sick Children. 458 pages. London: H. K. Lewis, 1889. Sydney: L. Bruck. Price, 6s. 6d., by Post, 7s.—The writer, who is well-known as the author of an excellent work on the treatment of disease in children, has produced a very concise book of modern medicine, which should prove useful to medical students, and to practitioners who have no time or inclination to peruse the text-books.

To give a right conception of disease and its treatment has been the aim of the author, and in this respect he has been successful.

**ILLUSTRATED LECTURES OF AMBULANCE WORK.** By R. Lawton Roberts, M.D., Honorary Life Member of, and Lecturer and Examiner to, the St. John's Ambulance Association. 3rd edition. 206 pages, 59 illustrations. London: H. K. Lewis, 1888. Sydney: L. Bruck. Price, 8s., by Post, 8s. 4d. This is one of the best practical works on the subjects of which it treats with which we are acquainted, and it should be useful not only as a reference book of immediate aid to the injured, but also as a guide to those intending to give such lectures. It contains a history of St. John's Ambulance Association, an epitome of human anatomy, and practical directions what to do in all cases of accidents,

**OBSTETRIC APHORISMS.** By J. G. Swayne, M.D., Consulting Physician, Accoucheur to the Bristol General Hospital, and Lecturer on Obstetric Medicine at the Bristol Medical School. 9th edition. 159 pages, illustrated. London: Churchill, 1888. Sydney: L. Bruck. Price, 8s. 6d., by Post, 8s. 10d. The object of this work is to give the student a few brief and practical directions respecting the management of ordinary cases of labour, and also to point out to him in extraordinary cases when and how he may act upon his own responsibility, and when he ought to send for assistance. This small work having passed through eight editions, requires no recommendation and, no doubt, it will be received in the same favourable manner as its former editions, especially by the junior members of the profession.

#### VITAL STATISTICS OF SOUTH AUSTRALIA AND ADELAIDE FOR 1888.

On December 31st, 1888, the estimated population of the colony, exclusive of the inhabitants of the Northern Territory and of aborigines, was 318,065, viz., 159,219 males and 158,846 females. This showed an advance of only 644 on the estimated population of the corresponding day of 1887—an increase which was less than that of any other of the last eight-and-twenty years.

The births registered in 1888 numbered 10,510, being less by 321 than those registered in 1887, and being less also than the number registered in any other year since 1880. The addition to population from excess of births over deaths was satisfactory, viz., 6,751. Though this was smaller by 136 than that of 1887, and less than the corresponding increase of any of the years 1884-6, it was greater than the increase of any year previous to 1884. The birth-rate per 1,000 of the mean population was 33·81, against 35·07 in 1887, and was lower than the rate of any other of the last fifteen years. The male births were 5,501, and the females 5,009. Of the

births registered in 1888, 281 were entered as illegitimate; the percentage of illegitimate to the total births registered being 2·7. In the previous year the number of illegitimate births was 270, and their percentage to all births registered 2·5.

The deaths registered in 1888 numbered 3,759, being, it is satisfactory to note, not only less by 185 than those registered in 1887, but less also than the number registered in any other year since 1879. The death of males were 2,126, and of females 1,633, the proportion being 130·2 males to 100 females, which was greater by 20·4 than the percentage of males to female births. The death-rate per 1,000 of the mean population was 12·09. This was remarkably low, being less, in fact, than the death-rate of any other year for at least twenty years. The deaths of infants under one year of age numbered only 1,008, against 1,204 in 1887, and were in the proportion of only 96 to 1,000 births registered.

Arranged in their relative classes and numbers, the causes of death in 1888 and the previous year were as follows:—

	1887.	1888.
Specific febrile or zymotic diseases ...	664	550
Parasitic diseases.....	24	22
Dietic diseases.....	54	49
Constitutional diseases.....	616	607
Developmental diseases.....	430	373
Local diseases.....	1,625	1,667
Violence.....	229	234
Ill-defined and not specified causes...	302	257

There were only 3 deaths from scarlet fever, 1 death from measles, and 9 from whooping cough. The deaths from enteric fever numbered 108 (70 males and 38 females), being less by 35 than the number registered in 1887. The death-rate from this disease per 1,000 of the mean population was 35, against 46 in the previous year. The deaths from diphtheria numbered 139 (74 males and 65 females), being more by 80 than the number registered in 1887, and the greatest number registered in any year for at least fifteen years. The proportion of deaths from this disease per 1,000 of the mean population was 45, against 19 in 1887. The deaths from phthisis in 1888 were 365 (208 males and 157 females), being 12 in excess of those registered in the previous year, and being the highest number recorded in any year for at least fifteen years; the death-rate per 1,000 of the mean population was 1·17, against 1·14 in the previous year. In 1888 the registered deaths from cancer numbered 116 (49 males and 67 females), being 6 above the number of the previous year, and being also the highest number of such deaths recorded in any year for at least fifteen years. The death-rate from this disease per 1,000 of the mean population was 37, as against 36 in the previous year. All the deaths, with one exception, were those of persons over thirty years old.

The estimated population of Adelaide and suburbs on December 31st, 1888, was 119,465. The estimated mean population for the year was 118,633. The births registered during the year numbered 4,371 (2,282 males and 2,089 females), and the deaths 1,994 (1,138 males and 856 females). The birth-rate per 1,000 of the mean population was 36·84, which was higher by 3·03 than the birth-rate of the colony as a whole, and higher by 9·15 than that of the city of Adelaide taken by itself. The death-rate for the year was 16·81 per 1,000 of mean population, being higher by 4·72 than the death-rate of the colony as a whole, and lower by 2·23 than that of the city by itself—that is, the city death-rate including all deaths in public institutions. In 1887 the death-rate of the somewhat smaller area then forming Adelaide and suburbs was 16·46.

## BACKWARD CONDITION OF STATE MEDICINE IN NEW SOUTH WALES.

The following editorial on the above subject appeared in the *Lancet* of June 15 :—

"A very able address was delivered at the Inter-colonial Medical Congress by Cosby W. Morgan, M.D., health officer of the port of Newcastle, New South Wales, on the subject of State Medicine in this colony, which has a population of nearly a million, and which, from its great importance in the Australian system, might be expected to treat medical questions of State and the medical profession with more respect. It is an unfailing sign of advancing civilization when a community shows an appreciation of public health and of the profession of medicine. According to Dr. Morgan, New South Wales is backward in these regards. There is neither a Public Health Act, such as obtains in Victoria, South Australia, Queensland, Tasmania, and New Zealand, nor is there a Medical Practitioner's Act, which defines the status of the medical profession or confers such privileges on the legally qualified as they possess in the United Kingdom. Our readers at home think their privileges scanty enough, but what would they think of the evidence of unqualified practitioners being taken as that of experts at coroner's inquests and in courts of law, even in courts of Assize, where questions of life and death are determined. Yet Dr. Morgan gives a case where, with great difficulty, the Governor was induced to commute a capital sentence in a case of rape, based on the loose and ignorant testimony of an unqualified witness. Instances are numerous in which club, hospital, and other appointments are held by unqualified persons. And, most discreditable of all, the Government frequently places an unqualified man on the Commission of the Peace, or appoints him a Coroner in a country district. The extreme disrespect for life and health displayed in such action by the responsible Government is without excuse. We cannot believe that the public men of New South Wales can realize what this means in country districts, where suffering and disease are the same as in Sydney, but without the same resources. Such absence of medical laws discourages medical education. It punishes educated medical men, but it does not punish them so much as the community which so neglects one of its primary duties. The Lunacy Act is supposed, by its interpretation clause, to require that medical men certifying be properly qualified, but Dr. Morgan has recently seen a case in which the certificate was signed by an unqualified medical man, 'being also a justice and a coroner.' So with certificates of death. Things are not much better with regard to laws designed to guard the public health. There is no compulsory Vaccination Act, and Dr. Morgan questions whether one-third of the infant population of the last ten years is vaccinated. Laws for the removal of nuisances or excreta are absurdly ineffective, as was shown in a case where the authorities of Newcastle kept depositing the contents of cesspools on one public ground after another till the slow action of the law stopped the public nuisance. Dr. Morgan puts this state of matters down to the discredit of municipal government and the want of a strong central authority to compel observation of the first laws of health. Municipal representatives are apt to be local property owners, and to be more bent on the improvement of the value of their property and the reduction of their rates than on the reduction of the death rate. The same municipal shortcomings in matters of sanitation

are to be found, it is alleged, in other parts of Australia and New Zealand. We commend the complaints of the medical profession of Australia to the statesmen and intelligent classes of these great colonies. In Victoria we know, from a recent meeting of medical societies, that quackery is impudent and extortionate. Nobody expects it to be absolutely put down, but every community should have the means of knowing who is an educated practitioner and who is not, and the colonies, though for the present uncrowded, have the same liability to bad epidemics, or even worse than the mother country, and the same need for preventive medicine and its honorable recognition by the State. They are exposed to the introduction of cholera, yellow fever, small-pox, and the like. Their constant epidemics are extremely virulent, such as enteric fever, diphtheria, and scarlatina. They have outbreaks of erysipelas and septicæmia; and they cannot afford to ignore sanitary science or the profession which represents its application to individuals and communities.

## THE MONTH.

### NEW SOUTH WALES.

DURING the half-year ended June 30, 130 deaths from typhoid fever and 101 from diphtheria were registered in the Sydney metropolitan district.

DR. GOODE, of Orange, has been granted a new trial in the action brought against him by Miss Davies, matron of the local hospital, for alleged libel and slander, on both of which counts the jury returned a verdict for £50 in favor of the plaintiff.

PROFESSOR DR. ANDERSON STUART, Mr. W. Neill, Dr. A. Murray Oram and Mr. J. F. Holle have offered to defray the cost of busts of eminent medical men to be placed in the new medical building of the Sydney University.

MR. ROBERT CALDER, M.B. et Ch.M. Aberd. 1876, late of Gosford, and formerly of Taviuni (Fiji), died at Kurrajong Heights on July 30, aged 40 years.

MR. SEPTIMUS HARWOOD, M.B. Edin. 1881, late of Bristol and Burnley (Eng.), died at Burwood (Sydney) on July 9, aged 35.

DR. W. C. ASHE, of Kiama, has succeeded to the practice of Dr. Harry Tresidder, at Coonamble, on the Castlereagh River, 375 miles N.W. of Sydney.

DR. W. R. CORTIS, of North Shore (Sydney), has been awarded the gold medal of the National Shipwreck Relief Society for having recently plunged into the harbour and rescued a man from drowning who had fallen overboard from one of the ferry steamers.

DR. GEO. SERJEANT, late of Echuca (Vic.), has been elected medical officer of the Balranald Hospital.

DR. C. H. SMITH-HOZIER, late of Windsor, has commenced practice at Kiama.

DR. SUTHERLAND accidentally shot himself, though not fatally, in the Broken Hill Hospital on Saturday, July 27.

DR. C. SWANSTON, late of Mudgee, has commenced practice at Elizabeth-street, Ashfield, a suburb 5 miles from Sydney.

DR. WADHAM, of Strathfield, near Sydney, while proceeding along the Morthlake road, on July 25, the horse he was riding slipped and threw him under a passing cart, the wheels of which went over the left arm, breaking it.



## NEW ZEALAND.

THE Medical Practitioners' Bill was introduced and read a first time in the Legislative Council on June 28.

MR LOCKE, an ex-member of Parliament, states that he has known cases of leprosy among the Maoris, and seen cases in the Taupo district of a hideous character. The lepers, when they died, had their clothing burned, and were buried in a fenced enclosure, which the friends were prohibited from approaching. Mr. Locke states the existence of Maori leprosy is well known to Dr. Hector and other scientists.

DR. K. G. T. BRANTING has removed from Woodville (Hawke's Bay) to Otaki, 53 miles N. of Wellington.

DR. C. N. COBBETT has left Auckland for England; Dr. T. G. Davy has taken up his practice.

DR. J. R. FRASER has removed from Upper Riccarton (Canterbury) to Kaikoura (Marlborough).

THE Hon. Dr. M. S. Grace, M.L.C., consulting surgeon of the Wellington Hospital, has been appointed by the Pope a Count of the Holy Roman Empire.

DR. JOS. HENBY, of Wellington, has been appointed chief medical officer of the N.Z. Government Life Insurance Department.

DR. PAYNE, of the Thames, has left *en route* for England, *via* Sydney and Melbourne. Dr. Volckman has been engaged by Dr. Payne to attend to his practice during the latter's absence.

## QUEENSLAND.

DURING the twelve months ended June last, 426 patients were treated at the Brisbane Hospital for Sick Children, in addition to 45 taken over from the previous year, and 195 were admitted to the Lady Musgrave Sanatorium at Sandgate. At the town dispensary connected with the hospital 2,963 patients were treated by Dr. Peter Bancroft during the same period.

DURING the twelve months ended June last, 230 patients were admitted into the Lady Bowen Maternity Hospital, Brisbane, 115 of these being married women, 111 single women, and 4 widows.

THE total number of cases treated at the Herberton District Hospital during the twelve months ended June last, was 185.

THE following medical gentlemen have been appointed Justices of the Peace in Queensland:—Drs. W. T. Cuthbert, Ravenswood; H. W. Swayne, Dalby; C. F. Webb, Brisbane.

MR. MOREHEAD has considered the evidence taken in the inquiry against Dr. Kesteven, of Brisbane, Government Medical Officer, in connection with his duties at the reception house, and the finding of the Board thereon. Mr. Morehead has written to Dr. Kesteven stating that the latter is to blame for the charges of neglect against him, and recommending him to be more careful in future.

## SOUTH AUSTRALIA.

A COMPLIMENTARY banquet was tendered on July 3, by the Friendly Societies of Crystal Brook, to Dr. Parkinson, who was welcomed back after fifteen months' absence, and to Dr. A. F. Smith, his *locum tenens*. Seventy-four gentlemen were present. Drs. Parkinson and Smith were each presented with an illuminated address. Dr. Smith has left for Petersburg, to commence practice on his own account.

DR. BRICKLE, of Mount Barker, has been elected President of the local Institute.

DR. ENGELHART has removed from Mount Pleasant to Robe, a seaport on Guichen Bay, 208 miles S.E. of Adelaide.

DR. T. K. HAMILTON, late of Laura, has commenced practice at Wakefield-street, Adelaide, as a specialist for diseases of the eye, ear, nose and throat.

DR. F. W. MONSELL has removed from Kapunda to Port Pirie.

DR. P. J. W. TERNAN has been appointed Medical Officer of the Hospital at Burrundie, in the Northern Territory, 200 miles from Port Darwin.

## TASMANIA.

A BILL is before the Assembly to abolish compulsory vaccination.

## VICTORIA.

THE hon. secretary of the Medical Students' Society has written to the managers of the Alfred Hospital, to suggest that for the completion of the clinical school of the hospital it would be advisable that some scheme should be adopted whereby the appointment of resident officers should be restricted to graduates of the Melbourne University. It was also suggested that the plan adopted at the Melbourne Hospital, where the term of office of the residents was restricted to one year, and the appointments made according to positions on the final honour list at the University, should be adopted at the Alfred Hospital. The managers decided not to bind themselves to adopt the suggestions at present.

DURING the first six months of the present year 466 deaths occurred from typhoid fever, against 251 during the same period in the previous year; the deaths due to diphtheria during the same period were 137 against 68 in 1888.

THE number of patients under treatment at the Alfred Hospital, Melbourne, during the year 1888-89 was 4,837, this number including in-patients, out-patients, and casualties.

THE annual report of the Victorian Eye and Ear Hospital shows that during the twelve months ended June last, the total attendances were 22,860, against 17,132 in the previous year. Of new cases, the number was 3,559, as compared with 2,989 last year; being an increase of 570, or nearly 20 per cent. Of those 3,559 new cases 443 were admitted as in-patients; being an increase of 37 over last year. The operations performed were 872. The total revenue for the year amounted to £3,043 18s. 9d. The increase of the hospital work—already indicated by the greater number of patients—necessitated the appointment of a third honorary surgeon, and Mr. J. P. Ryan, who was for many years honorary assistant surgeon, was appointed to the position.

THE number of patients treated at the Homoeopathic Hospital in Melbourne during the year ended June last, was 2,722, the largest yet on record, comprising in-door patients, 690; out-door patients, 1,898; casualties, 134. The visits of the out-patients amounted to 6,442, while the total number of prescriptions dispensed was 12,114. Of in-patients 123 more cases than last year had been admitted; of these 580 had been discharged cured or relieved, 11 were discharged incurable, and 22 were left at the end of June.

THE annual report of the Melbourne Women's Hospital shows that during the twelve months ending June last, 2,692 patients had been relieved, 1,060 being in-patients, and 100 being boarded out at the expense of the Hospital.



THIRTY medical students and fifteen pupil nurses received clinical instruction at the Melbourne Women's Hospital, during the year 1888-9.

A new hospital was opened at Swan Hill on July 15; the cost has been about £5,000.

THE HON. DR. LE FEVRE, M.L.C., of Melbourne, has been served with a writ at the instance of Mr. A. M'Coll for £13,200, the penalties for alleged wrongful sitting in the Legislative Council without the necessary qualification. Plaintiff alleges that the Le Fevre named in the declaration owned some property which he had not held for the specified time prior to the election.

DR. FRANCIS ALPHONSUS MCIVER, M.B. et Ch. M., 1883, M.D., 1885, Ed., died at his residence, View-street, Sandhurst, on August 7, after a short illness, at the age of 41 years. The deceased gentleman settled at Sandhurst about four years ago.

DR. P. J. FLANAGAN, late Resident Medical Officer of the Melbourne Hospital, has commenced practice at Mt. Alexander-road, Moonee Ponds, a suburb of Melbourne.

DR. E. L. GAULT, of the Melbourne Hospital, has been elected resident surgeon of the Alfred Hospital, Melbourne.

THE salary of Dr. Henderson, resident surgeon of the Castlemaine Hospital, has been increased by £100.

SURGEON GEORGE HORNE has resigned the command of the Victorian Volunteer Ambulance Corps.

DR. C. M. D'A. LEMPRIERE has removed from South Yarra (Melbourne) to Geelong.

DR. C. H. MOLLOY, late resident medical officer at the Melbourne and Alfred Hospitals, has been appointed, temporarily, medical superintendent of the former institution, at a salary of £450 per annum, in the place of Dr. Lewellin, resigned.

DR. T. ORDE SMITH, of Echuca, has been appointed Medical Missionary at Cameroongunga Aboriginal Station, New South Wales, in the place of Dr. Serjeant resigned.

DR. F. W. WINGROVE, a new arrival, has settled at Eltham, 14 miles N.E. of Melbourne.

## MEDICAL APPOINTMENTS.

Bartley, Joseph, M.B. et Ch. B. Melb., to be Health Officer for Shire of Yarrowonga, C. R., Vic.  
Branting, Karl Gustaf Teodor, M.D., to be a Public Vaccinator for the district of Otaki, N. Z.  
Charlton, Clifton, M.B. et Ch. M. Ed., to be an additional Public Vaccinator for the district of Feilding, N.Z.  
Flood, Thomas Nicholas, M.D. et Ch. B. Dub., to be Government Medical Officer at Croydon, Qu., vice Dr. K. I. O'Doherty, resigned.  
Fraser, John Robert, M.B. et Ch. B. Dub., to be a Public Vaccinator for the district of Kulkoura, N.Z.  
Gorrick, Herbert Percy Critchett, M.D. New York, to be Government Medical Officer and Vaccinator for district of Hillgrove, N.S.W.  
Kennedy, Thomas John Moore, M.B. et Ch. B. Melb., elected Resident Medical Officer of the Melbourne Hospital.  
Lempriere, Charles Monteiro d'Almeida, M.R.C.S.E., to be Health Officer for shire of Corio, Vic.  
MacCormick, Alexander, M.D. et Ch. M. Ed., M.R.C.S.E., to be a Surgeon in the N.S.W. Naval Brigade.  
Moore, John Irwin, L.R.C.S. Irel., L.K.Q.C.P. Irel., to be Government Medical Officer at Springsure, Qu.  
Moreton, Charles Peyton, M.R.C.S.E., to be a Junior Medical Officer of the Hospitals for the Insane in Victoria.  
Musro, Andrew Watson, M.B. et Ch. M. Ed., to be Vaccinator for Sydney and Suburbs.  
Musro, William John, M.B. et Ch. M. Ed., M.R.C.S.E., to be a Surgeon in the New South Wales Volunteer Naval Artillery.  
Murray, James Adam Johnston, M.B., et Ch. M. Ed., to be a Public Vaccinator for the district of Waipara, N.Z.

Park, John Steele, L.R.C.P. Lond., to be Health Officer for the district of Westbury, Tas.  
Thomson, John Rae Menzies, M.B. et Ch. B. Melb., to be Public Vaccinator at Essendon, Vic.  
Violette, William Bradley, M.B. et Ch. M. Glas., to be a Surgeon in the New South Wales Volunteer Naval Artillery.  
Westrum, William Adolph, M.D. Munich, to be Government Medical officer and Vaccinator for district of Nyngan, N.S.W.

## PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners, by the respective Boards:—

### NEW SOUTH WALES.

Leslie, Louis Gordon, L.R.C.P. Edin. 1883; L.R.C.S. Edin. 1883  
Lewis, William Morrow, M.D. Royal Univ. Irel. 1886; M. Ch. Royal Univ. Irel. 1887; L. Mid. K.Q.C.P. Irel. 1887.  
Cory, Guy Chamberlyn, L.S.A. Lond. 1886; M.R.C.S. Eng. 1888.  
Arthur, Richard, M.B. et C.M. Univ. Edin. 1888.

### NEW ZEALAND.

Goff, Bruce Edward, M.B. et Ch. M. Glas. 1886.  
Volckman, Bernard, L.S.A. Lond. 1884; M.R.C.S. Eng. 1886.  
Volckman, Ronald, M.R.C.S. Eng. 1880; L.R.C.P. Ed. 1881.

### QUEENSLAND.

Blyth, David, M.B. et Ch. M. Glas. 1860.

### VICTORIA.

Meirillea, John Stewart, L. et L. Mid. R.C.P. et R.C.S. Edin. 1888; L.F.P.S. Glas. 1888.  
Wheeler, Henry, M.R.C.S. Eng. 1880; L.R.C.P. Lond. 1881.  
Paton, David Montgomerie, L. et L. Mid. R.C.P. et R.C.S. Edin. 1889; L.F.P.S. Glas. 1889.  
Wingrove, Francis William, L. et L. Mid. R.C.P. et R.C.S. Edin. 1889; L.F.P.S. Glas. 1889.

Additional qualifications registered:—

Anderson, Eugene W., Ch. B. Melb. 1887 and M.D. Melb. 1888.  
Kennedy, Thomas J. M., Ch. B. Melb. 1888.  
Fetherston, Richard H. J., M.D. Edin. 1888 and M.D. Melb. 1889 (a. e. g.).  
Baird, John C., Ch. B. Melb. 1889.

### WESTERN AUSTRALIA.

McWilliams, George Frederick, M.B. et Ch. B. Melb. 1889.

## BIRTHS, MARRIAGES, AND DEATHS.

\* \* The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcement.

### BIRTHS.

BARKAS.—July 4, at Paddington, Sydney, the wife of W. J. Barkas, M.R.C.S. Eng., L.R.C.P. Lond., of a daughter.  
FORBES.—On the 27th July, at Grafton, N.S.W., the wife of A. Forbes, L.R.S.I., L.R.C.P. Ed., of a daughter.  
ICK.—On the 17th June, at Albert-park, Melbourne, the wife of Rev. T. B. Ick, M.B., of a son.  
M'KENNA.—On the 22nd July, at Shepparton, Victoria, the wife of Dr. M'Kenna, of a daughter.  
M'MASTER.—On the 26th July, at Goulburn, N.S.W., the wife of R. D. M'Master, M.D., of a son.  
WALSH.—On the 14th July, at Kew, Melbourne, the wife of Wm. Butler Walsh, M.D., of a daughter.  
WEIGALL.—On the 13th July, at Kesternwick, Melbourne, the wife Dr. R. B. Weigall, of a daughter.

### MARRIAGE.

M'INTYRE—BURNS.—On June 19, at Dunedin, N.Z., by the Rev. J. R. M'Kerrow, Dr. P. M'Intyre, of Timaru, to Mary Grant, eldest daughter of Arthur J. Burns.

### DEATHS.

CHAMBERS.—July 22, at the residence of her father, Pauline Mary Louise, second daughter of Dr. Thos. Chambers, of Sydney, from acute peritonitis, aged 23 years.  
NEWMARCH.—August 5, at St. Leonards, Sydney, Ethel Maud, the wife of Dr. Bernard James Newmarch, aged 28 years.

## REPORTED MORTALITY FOR THE MONTH OF JUNE, 1889.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Croup and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
<b>N. S. WALES.</b>														
Sydney .....	132,846	297	155	64	...	2	7	...	4	5	19	11	3	2
Suburbs .....	215,849	841	298	144	...	1	27	4	19	10	21	16	7	2
<b>NEW ZEALAND.</b>														
Auckland .....	35,858	65	28	13	...	...	...	1	2	2	1	1	...	...
Christchurch .....	16,455	24	13	2	...	...	...	...	1	...	...	2	...	...
Dunedin .....	23,546	42	19	2	...	...	...	...	...	...	1	3	3	...
Wellington .....	29,075	65	26	1	...	...	...	...	...	...	3	6	5	...
<b>QUEENSLAND.</b>														
Brisbane .....	51,689	182	85	39	}	...	9	1	6	10	8	9	3	...
Suburbs .....	21,960	126	34	24										
<b>SOUTH AUSTRALIA.</b>														
Adelaide .....	312,813	...	...	...	...	...	...	...	...	...	...	...	...	...
Adelaide .....	43,750	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TASMANIA.</b>														
Hobart .....	34,765	75	37	6	...	...	...	...	4	...	2	5	3	...
Launceston .....	21,399	69	48	8	...	...	1	...	4	...	2	8	4	...
Country Districts .....	91,607	243	64	...	...	...	4	...	1	1	...	...	...	...
<b>VICTORIA.</b>														
Melbourne .....	75,400	155	101	} 251	1	...	43	19	36	12	65	41	26	4
Suburbs .....	362,385	1193	585											

## METEOROLOGICAL OBSERVATIONS FOR JUNE, 1889.

STATIONS.	THERMOMETER.				Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.		Depth.	Days.		
						Inches			
Adelaide—Lat. 34° 55' 33" S. ; Long. 138° 36' E. ....	...	...	...	...	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S. ; Long. 174° 49' 2" E. ....	111.	68.	54.3	40.	...	10.410	25	81	...
Brisbane—Lat. 27° 28' 3" S. ; Long. 153° 16' 15" E. ....	130.2	75.5	59.1	41.6	29.983	0.717	3	63	W.
Christchurch—Lat. 43° 32' 16" S. ; Long. 172° 38' 59" E. ....	112.	55.2	40.3	22.	...	2.845	16	84	...
Dunedin—Lat. 45° 52' 11" S. ; Long. 170° 31' 11" E. ....	84.	49.	38.5	24.	...	1.938	14	83	...
Hobart—Lat. 42° 53' 32" S. ; Long. 147° 22' 20" E. ....	...	60.	48.4	33.8	29.698	8.15	21	90	...
Launceston—Lat. 41° 30' S. ; Long. 147° 14' E. ....	...	63.	49.3	29.	29.740	5.84	17	86	...
Melbourne—Lat. 37° 49' 54" S. ; Long. 144° 58' 42" E. ....	...	66.	52.5	37.6	29.758	2.78	16	...	...
Sydney—Lat. 33° 51' 41" S. ; Long. 151° 11' 49" E. ....	...	68.	55.9	44.1	29.870	1.13	13	77	N.W.
Wellington—Lat. 41° 16' 25" S. ; Long. 174° 47' 25" E. ....	107.	60.	48.9	31.5	...	4.036	22	79	...

# AUSTRALASIAN MEDICAL GAZETTE.

## ORIGINAL ARTICLES.

### TREATMENT OF TYPHOID FEVER BY COLD BATHS.

BY H. RABL, M.D., OF MURTOA, VICTORIA.

FROM a report in your July issue by Dr. Hare, of the Brisbane Hospital, on the treatment of typhoid fever by cold baths, I learn that this kind of treatment, contrary to its merits, seems to be quite uncommon yet, even in hospitals. I therefore encroach upon your valuable space to show the experience of a country practitioner in this line. Even in Germany, yet a young practitioner, when he starts upon his professional career, is often told by some older country colleague, when speaking about bathing of typhoid fever patients: "That is all very well in well-equipped hospitals, where you have plenty of skilled nurses, a house-surgeon always at hand, and so on, but when you go out in the country you find matters quite different, and it is impossible to carry out this treatment." Again, when I came to this continent, I was told from all sides: "That is all very well in Germany, but the people, the climate, and all other circumstances are so very different that you find it impossible to adhere to it."

It is my intention to show that these "good advices" are wrong and without foundation altogether; that the very circumstances—for instance, "distance of locality"—that seem to make it impossible are in favour of a treatment which, from its merits, ought to be as universally adopted as the carbolic acid or sublimate are in treating wounds.

To go in *medias res*, I quote an example:—In October, 1887, I was called to see a child, about 32 miles distant. She was nearly five years of age, and had been bad for about a week; the symptoms, under an expectant treatment, becoming gradually worse and alarming to the parents. When I arrived I found a typical case of typhoid fever, the symptoms of which I need not take up your time in narrating, they are only too familiar, suffice it to say the temperature at 3 p.m. was 105·4 in ano, the pulse about 140, the patient highly delirious. A bath of between 70° and 80° was instantly ordered and given for 10 minutes only, with the result of reducing the

temperature by 1·4°. Another bath was given at 6 p.m., this time for 15 minutes, temperature before bath being 105·2°, after 102·8°.

For the details of the case I beg to draw the attention to the following table. On the express wish of the parents I stayed at the place until the next morning to make them familiar with the treatment. Then I returned home, getting a written report of the temperature every day by mail, without seeing the patient any more at all.

N.B.—The sign † means a bath. The tem. after the † is taken from  $\frac{1}{2}$  to  $\frac{1}{2}$  hour post balneum.

24th November.—8 p.m., 105·4 † 104·0, 10 minutes in the water; 6 p.m., 105·2 † 102·8, 15 minutes in the water; 9 p.m., 105·2 †; 11.30 p.m., 105·0 †.

25th.—3.30 a.m., †; 7 a.m., 105·0 † 99·0; 10 a.m., 104·0 † 101·0; 1 p.m., 105·8 † 99·0, 25 minutes in water; 4 p.m., 105·8 † 99·8; 7 p.m., 105·8 † 100·2; 10 p.m., 105·2 † 100·6. No medication.

26th.—3 a.m., 105·0 † 96·0, 22 minutes in water, seems easier, conscious; 6.30 a.m., 104·0 †; 11 a.m., 104·8 † 99·4; 2.30 p.m., 104·8 † 100·2; 7.30 p.m., 104·4 † 99·8; 12 p.m., 105·0 † 99·2. Antipyrin,  $7\frac{1}{2}$  grains (0·5) in one dose.

27th.—10.30 a.m., 103·2 † 97·2; 2.30 p.m., 104·0 † 99·0; 7 p.m., 104·4 † 100·0; 10 p.m., 105·0 † 98·0. Antipyrin,  $7\frac{1}{2}$  grains (0·5) in one dose.

28th.—9 a.m., 104·4 † 100·0; 12.30 p.m., 104·4 † 97·8, the patient has generally improved, the powders seem to have a good effect at night; 4 p.m., 104·8 † 100·0; 8 p.m., 104·8 † 98·0; 11.15 p.m., 105·0 † 99·2. Antipyrin,  $7\frac{1}{2}$  grains (0·5).

29th.—9 a.m., 104·0 † 99·4; 12.30 a.m., 104·0 † 99·0; 4 p.m., 104·4 † 101·0; 7.45 p.m., 104·4 † 100·0; 11.15 p.m., 103·8 † 99·4. Antipyrin,  $7\frac{1}{2}$  grains (0·5).

30th.—9 a.m., 103·8 † 99·0; 12.50 p.m., 103·6 † 100·2. (Report: Sleeps well after the powders, given after the last bath at night; slept till 5 this morning. The bowels are regular, motions like normal, takes food well, asks for everything, wants cake, &c.; not delirious). 5 p.m., 104·4 † 100·8; 9 p.m., 104·4 † 100·4. Antipyrin,  $15\frac{1}{2}$  grains (1·0), div. in two equal parts, given 10 and 11 p.m.

1st December.—9 a.m., 103·0; 11 a.m., 103·4 † 99·8; 2.45 p.m., 103·8 † 101·6; 7.30 p.m., 105·0 † 100·0; 11 p.m., 105·0 † 101·0. Antipyrin,  $7\frac{1}{2}$  grains (0·5).

2nd.—9.15 a.m., 102·4; 1 p.m., 104·2 † 101·2; 4 p.m., 104·6 † 101·4; 8.15 p.m., 104·4

† 101.0. Antipyrin,  $15\frac{1}{2}$  grains (1.0), div. in two parts, given at 8.15 and 10.30 p.m.

3rd.—8 a.m., 102.8, slept till 3 a.m., taking food well, wants to get up, asking for food, &c.; 12.30 p.m., 104.0 † 101.4; 5 p.m., 104.4 † 101.6; 8.30 p.m., 104.4 † 101.6. Antipyrin,  $7\frac{3}{4}$  grains (0.5).

4th.—10.30 a.m., 105.4 † 100.2, slept till 3 a.m. this morning; 2 p.m., 105.6 † 101.8; 5.30 p.m., 104.8 † 101.4; 8.30 p.m., 104.0 † 100.2. Antipyrin,  $7\frac{3}{4}$  grains, at 9 p.m.

5th.—9 a.m., 104.2 † 101.2; 1 p.m., 103.4, † 100.4; 4.30 p.m., 104.4 † 102.4; 8.30 p.m., 102.8; 10.30 p.m., 105.8 † 100.8. Antipyrin,  $7\frac{3}{4}$  grains, D tales Dos II; first powder vomited.

6th.—9 a.m., 105.2 † 100.0, slept till 3 a.m., perspiration last night and this morning, tongue clean, appetite good, a little restless after every bath and complains of headache until she goes to sleep; 12.30 p.m., 104.6 † 100.8; 4 p.m., 105.2 † 101.0; 8.30 p.m., 104.0 † 99.0. Antipyrin,  $7\frac{3}{4}$  grains.

7th.—8 a.m., 102.2; 11.30 a.m., 103.2 †; 4 p.m., †, thermometer broken; 9 p.m., †, the one substituted not reliable enough to quote figures.

8th.—9 a.m., †; 9.30 p.m., 104.8 † 99.0, reliable thermometer.

9th.—9.30 a.m., 103.6 † 98.0; 1 p.m., 103.6 † 99.0; 4.30 p.m., 103.2 † 100.0; 8 p.m., 102.8; 10 p.m., 106.2 † 101.8. Antipyrin,  $7\frac{3}{4}$  grains.

10th.—8 a.m., 102.6; 10 a.m., †, thermometer broken; 1 p.m., †.

11th.—a.m., †, no thermometer; p.m., †. Antipyrin,  $7\frac{3}{4}$  grains.

12th.—10 p.m., †.

13th.—9.30 p.m., 102.8; 10.30 p.m., 103.2 †. Antipyrin,  $7\frac{3}{4}$  grains.

14th.—1 p.m., 101.6; 10.30 p.m., 101.2.

15th.—10.30 a.m., 98.0, ranging from 98.0 to 100.0; no notes taken by a mistake of attendant.

20th.—9 p.m., 99.8.

21st.—8 a.m., 98.0; 12 noon, 99.6; 9 p.m., 101.2.

22nd.—8 a.m., 99.4; 1.30 p.m., 100.6; 8.30 p.m., 102.0.

23rd.—9.30 a.m., 99.0; 1.30 p.m., 102.0; 8 p.m., 104.6; 9.30 p.m., 104.0. Antipyrin,  $7\frac{3}{4}$  grains.

24th.—7.30 a.m., 101.0; 12.30 p.m., 104.2; 3 p.m., 104.8, bathing; 9 p.m., 104.0 † 98.4. Antipyrin,  $7\frac{3}{4}$  grains.

25th.—9 a.m., 102.0; 1.30 p.m., 104.4 † 99.6; 5 p.m., 104.6 † 100.0; 9.30 p.m., 104.0 † 96.2.

26th.—9 a.m., 103.0; 10 a.m., 103.0; 2.30 p.m., 104.0 † 98.0; 5.30 p.m., 105.2 † 99.0; 9 p.m., 105.6 † 99.8.

27th.—8.30 a.m., 102.6; 10.30 a.m., 102.8; 12.30 p.m., 102.4; 3.30 p.m., 104.2 † 98.0; 6.30 p.m., 104.2 † 101.0; 9.30 p.m., 105.2 † 100.6.

28th.—1 a.m., 104.0 † 100.0; 9.15 a.m., 101.2; 12.30 p.m., 102.2; 2 p.m., 102.2; 3.30 p.m., 103.0 † 99.2; 6.30 p.m., 104.2 † 101.2; 10.30 p.m., 103.8 † 99.2. Antifebrin, 4 grains, D tales Dos II, at 11 and 12 p.m.

29th.—9.30 a.m., 102.6; 10.30 a.m., 104.0 † 99.8, slept very well last night; 1.30 p.m., 104.2 † 101.2; 4.30 p.m., 103.8 † 101.2; 7.30 p.m., 102.6; 11 p.m., 102.0. Vacat while asleep.

30th.—11.30 a.m., 101.2; 3 p.m., 102.6; 4 p.m., 104.0 † 101.6; 7.30 p.m., 102.8; 10 p.m., 102.0. Antifebrin, 4 grains.

31st.—8.30 a.m., 101.8; 11.30 a.m., 102.8; 1.30 p.m., 103.0 † 98.6; 5 p.m., 102.4; 6.30 p.m., 102.8; 10 p.m., 101.2.

1st January, 1888.—10 a.m., 98.6; 2.30 p.m., 101.8; 5 p.m., 102.4; 8 p.m., 102.6; 10.30 p.m., 102.2. Antifebrin, 4 grains.

2nd.—9 a.m., 98.0; 12.45 p.m., 101.0; 3.15 p.m., 101.8; 6 p.m., 102.0; 8.30 p.m., 101.2; 10.30 p.m., 100.4. Antifebrin, 4 grains.

3rd.—9.30 a.m., 98.0; 1 p.m., 100.4; 7 p.m., 100.4; 7.30 p.m., 101.2; 10.30 p.m., 99.8, went to sleep and slept till 10 next morning.

4th.—10 a.m., 97.6; 1 p.m., 97.8; 4 p.m., 99.0; 9 p.m., 100.0; 11 p.m., 99.6.

5th.—9.30 a.m., 98.4; 12.30 p.m., 98.0; 9 p.m., 99.4.

6th.—9 a.m., 98.2; 2 p.m., 98.6, got up; 9 p.m., 99.4.

7th.—9 a.m., 98.4; 2 p.m., 99.2; 9 p.m., 99.2.

8th.—8 a.m., 98.6; 1 p.m., 99.4; 11 p.m., 98.8.

9th.—9.30 a.m., 99.4; 2 p.m., 99.6; 9.30 p.m., 99.8.

10th.—9.15 a.m., 99.0; 2.30 p.m., 99.2; 8.30 p.m., 99.0.

11th.—9.30 a.m., 98.4.

At first sight it seems hazardous to leave a patient with high fever to the seemingly injudicious treatment of the parents without even a "skilled nurse," but the result speaks for itself. And that is not the only one, but I could quote dozens of the same kind, the exact temperature and history of all of which I have on paper, but it would be only wasting time and space to follow them. Suffice it to tell that I treated, in the season 1884-5, 15 typical typhoid fever cases by bathing, with 1 death; 1885-86, 40, with 2 deaths; 1886-87, 9, with 1 death; 1887-88, 9, with no death; 1888-89, 2, with no death. That is 75 cases with 4 deaths, or a mortality of 5.3 per cent. Although I do not lay any value on a

statistic of this kind, because the number is hardly sufficient to base a statistic on, and an unscrupulous observer can make a good statistic for any treatment he may fancy. Of the cases quoted a good many were lying at a distance of 10 or 12 miles from my residence, and were seen by me once a week only, or even once a fortnight. Besides these 75 cases quoted I had several cases of typhoid fever in which the temperature was ranging only between 100-103, which did not require bathing, but recovered under expectant treatment. However, the 75 cases referred to are only those in which the fever (103-105) required special attention; therefore, by adding the other cases, the statistics as to mortality would be favourably influenced, but it has no bearing on the bath treatment.

The temperature is taken every time in ano or in vagina. I think it is a mistaken decency to have any objection to that. I never found any obstacle in this way. In the axilla everybody knows the difficulty with a thin person; if taken in the mouth mistakes occur if the patient happens to open the mouth, and danger arises from biting on the thermometer. As we want to know the temperature of the blood and not of the skin only, and as the safety of the patient depends on that knowledge, I think we ought to be perfectly sure in this point.

The above table shows that by a bath of 15 minutes' duration, and of a temperature that feels quite comfortable to an adult in health, the temperature is brought down by 3-4 degrees, and if it keeps down about 100°, say only one hour after the bath, we actually reduce the fever time the patient has to go through by one-third; that is, we shorten the three weeks of continuous high fever to two or one and a-half weeks. Besides, every bath has an evident tonic influence on the heart's action and on the whole nervous system. If, with a child, we had before the bath a thready pulse of 130 and more, with an adult one of 120, after the bath the pulse is strong and full, beating 100 or 80 respectively; to say nothing of the splendid effects it has on the sensorium in lessening or banishing all pains, strengthening the appetite, producing quiet sleep, and warding off lung complications. My rule is testing the temperature every three hours, night and day, and bathing every time the thermometer shows 103°. Much discussion has been aroused about the temperature the water ought to have and the duration of the bath, and the question is not definitely closed, as two parties exist at the present time—the Radicals *sit venia verbo* (Brand, the originator of the system, and his adherents) and the moderate party (Ziemssen and others). I think the temperature is optional, so far as you can produce about the same effect by bathing at

70° for 15 or 20 minutes as by bathing at 60° for 10 minutes. Practically, the question is mostly solved in nearly all country houses by having no common thermometer at hand at all, and you can quite as well do without it. For children you may take the chill off when the water comes out of the underground tank, and even for adults it is advisable to do so, at least in the beginning. I have in all my cases yet done without the aid of a so-called "skilled nurse," because in every house you find somebody that is able to learn the application of the thermometer in no time; besides, I would rather have somebody who carries out the instructions to the letter than one that is only too liable to follow their own head and "experience." In order to give the attendant as well as the patient some rest during the night it is sometimes judicious to stop bathing at 9 or 10 p.m. and give a full dose of antipyrin or antifebrin in powders in one or two doses, not small doses repeatedly in a big bottle of mixture; the patient then soon falls to sleep, and bathing can be started again in the morning. Another indication to stop bathing for a time during the night is to give the patient time to get his feet warm. Very often when the time for bathing has arrived again you find the body burning hot and the feet still cold; it is advisable then to warm the feet artificially in the intervals. Sometimes the patient does not come out of the shivering, the whole body, the skin at least, feels cool, and although the heart's action is regular and not too fast, yet the thermometer in ano registers from 104° to 105°; it is then when the beneficial influence of an antipyretic drug comes in; a full dose of antipyrin or antifebrin (the first I prefer) will reconstitute the deficient action of the skin. The integument, by too many cold baths, has been overtaxed in its duty of regulating the radiation of the heat and goes out on strike, so to say. But you may justly say, why trouble about bathing if antipyrin or antifebrin will do to reduce the fever? The answer is, you get along right enough with the drug in mild cases but not in severe ones. The drugs soon lose their power if you have to give them for several weeks, or irritate the stomach too much, so as to be vomited again, and then you cannot help the impression of administering a strong poison by continuously giving big doses of them. Although the height of the fever may be reduced to a moderate degree the sensorium is not relieved at all; there is no sleep, the tongue, the mirror of the stomach, is in a frightful state; the intestines are much relaxed, the body is covered with artificial exanthema, pulse fast, small, moist râles in both lungs, *exitus letalis*—that is the image of patients overfed with antipyretic drugs I have repeatedly seen in consultation. On

the other side, we see a patient with cool head, natural expression, moist tongue (although coated) wanting to eat more than he is allowed, sleeping splendidly between the baths, hardly any pain.

The mother of the child whose history I quoted above told me that another child of hers had the typhoid fever since. For obvious reasons a medical man nearer at hand was called in. The child was treated only with drugs, and recovered, but the mother voluntarily stated that the bathing is less troublesome, more simple, and nicer altogether. She would have resorted to it again if the doctor would have told them from the beginning that it was a case of typhoid fever.

Sanguis in stools is not considered by authorities as a contraindication to bathing, and I can fully endorse this, as I had at least one patient with profuse sanguinolent discharge where bathing was not stopped.

In concluding I may comment on the fatal results I had. The first one—a boy of 6 years of age—died, after having had 126 baths, at the end of the fourth week, from dropsy and exhaustion, nephritis parenchymatosa having intervened in the third week. I have very little doubt that without baths he would not have seen the third week at all, with a fever ranging between 104–105·5. The second was a woman in very poor circumstances, suckling a baby; hyperpyretic, ranging between 105–106; death on the fourth day after I had seen her. She was really neglected. In my absence another woman was called in to attend to her, and she administered the thermometer upside down for a whole day between my visits. It is hardly fair to use this case for statistic purposes at all, still I reckon it in. The third was a rather obstinate half-grown girl, treated at a distance of 12 miles, seen only once by me. She would not stop in bed, would not suffer to be bathed, and was at last reported to have got severe diarrhoea and griping pain in the abdomen; and these features are common with the symptoms of the fourth fatal case I had. A girl 8 years of age died on the fourth day after I had seen her, affected with diarrhoea resembling cholera, griping pain, moderate fever only, bluish-black spots having made their appearance in the last 24 hours. It is this choleraic form of typhoid fever, with indomitable diarrhoea, which I dread, and which caused two out of the four fatal cases. Yet I rather leave diarrhoea unchecked than use any opiates at all, because I cannot think of anything more injurious than opium, morphia or chloral-hydrate in febris continua.

I cannot conclude without highly recommending to study the classical works by Dr. Liebermeister, "*Handbuch der Pathologie und Therapie des Fiebers*" and "*Die Wasserbehandlung der typhösen Fieber*," by Dr. Ernst Brand.

## NOTES ON A CASE OF LUPUS.

READ BEFORE THE NEW SOUTH WALES BRANCH,  
B.M.A.

BY V. MARANO, M.D.

LUPUS, as you are well aware, is a most obstinate disease of the skin, and resists often to the most energetic treatment. The case, which I am going to bring under your notice, had resisted all sorts of treatment for over five years, but eventually yielded to the hypodermic injections of sublimate corrosive. I fear my notes will not be of sufficient interest for you; yet my desire that the efficacy of this new measure should find confirmation, or otherwise, on a larger scale than I have opportunities for, is my excuse for reading them at your meeting.

The history of the case is briefly the following:

T. C., 22 years old, single, printer by trade, consulted me on April 2, 1887, and stated that the members of his family were all healthy, and that about three years previously he first noticed the appearance of the disease in the form of numerous, small, grouped, reddish points on the left side of the bridge of his nose, whence they spread to the lateral surface of the same side, and to the corresponding part of the upper lip. The patch becoming more prominent and disfiguring he was induced to seek advice at the hospital in Dundee, where the affected part was scraped and then cauterized with some fluid caustic. The disease spread to the right side of the parts above described, and to the septum, and he had to undergo two more operations, both times with the galvano-cautery.

When he called on me the disease had spread to the middle of the upper lip and to the corresponding part of the gum beneath. One central incisor was completely loosened, and surrounded by different lesions from nodules to ulceration. Chloroform having been administered by Dr. Roth, I pulled the one incisor aforesaid, scraped with the dermal curette and applied Paquelin's. Without becoming wearisome with details I will simply state that the disease kept spreading on both sides along the alveolar arch, and posteriorly to the hard palate. On this there formed in course of time several centres of ulceration, with a tendency to confluence, while between the teeth there were nodules of various sizes, pale in appearance, while the mucous membrane dividing the healthy from the diseased tissues was traversed by a finely branching network of blood vessels, as is well illustrated by some drawings made by a friend of mine.

Besides a general treatment with arsenic, iron, cod-liver oil, potas. iodide, I used the dermal curette a second time; multiple puncture with a

needle charged with trae. iodi; brushing with the following preparation: Iodini, potas. iodi., aa gr. 15, glyceri, M. 80. The disease seemed at last to have been subdued, and he left for the country to fill a place on a station. Returned to me, however, on April 24, 1888, the lupus having assumed the proportions shown in the drawings. It was then that I used the sublimated injections, though only a few as he had to return to his occupation, but returned the following August, when between the 7th and the 27th I administered 11 injections. Rapid improvement followed. In the following October I gave 14; in January, 1889, five; and in the latter end of March nine more injections; when he left for the country again to return in May, when the last six injections were given, the lesions having almost entirely disappeared. One gr. perchloride in one hundred minims dist. water has been the solution employed by me, and having used from between 12 to 24 minims at one sitting. Only once there were some rather unpleasant symptoms arising, chiefly from the patient having swallowed some of the solution. I inject each papula or tubercle in its centre and each ulceration round its border and right under its bed. The day following the injection a film of necrobiotic tissue is found over the lesion. This film clears away in a day or two more, and the ulcerated superficies below will appear healthy and the loss of substance less, while the other lesions become smaller each time till absorbed. If, however, the injections are stopped the healing process will soon cease also. What is most remarkable in this mode of treatment is the feeling of comfort following each injection, until in three or four days the patient loses all sense of the part being affected. It was due to this, probably, that my patient soon gained in weight under it, as he could only eat with great pain before it was commenced and had become very despondent. The length of time employed was simply due to the peculiar conditions of my patient, who could not remain in town longer than two or three weeks at a time, and then at intervals of two to four months. Besides, the diseased superficies being very extensive, no more than a limited part of it could be treated at each sitting. I must not forget mentioning that the characteristic reddish colour accompanying this disease, disappears from the first injections, the parts becoming paler and smoother.

Although the hypothesis that tuberculosis of the skin, lupus, and scrophuloderma are only different manifestations of the same tubercular poison has not passed yet to the domain of ascertained scientific facts, yet I am convinced that lupus is caused by a specific virus. It was this belief in the etiology of lupus that suggested to me the idea of using a germicide, and the way in which this

acted has been to me an additional proof of the correctness of the said hypothesis.

NOTE.—Patient returned about the middle of July, the disease having made a fresh start between the two lateral and the other central incisors. The teeth were extracted by Dr. Burne, and about 15 injections of 1 in 60 sublimated solution given between the 15th July and the 6th of August. Saw patient on 2nd September again, when a small abrasion was found near the right lateral incisor yet unhealed.

## ON SKIN-GRAFTING AND ITS RECENT ADVANCES.

READ BEFORE THE N. S. W. BRANCH B.M.A.,

BY THE PRESIDENT, THOMAS FIASCHI, M.D.,  
ET CH. D., PISA.

It is now 18 years since Reverdin introduced his method of skin-grafting for the treatment of large surfaces deprived of skin either from the ravages of disease, from burns, or from sloughing following injury. The aims of this method were, to produce cicatrization in extensive losses of skin where, from the distance of the margins, it was not possible; to hasten it, in slowly healing ulcers; and in all cases to produce a better kind of cicatricial tissue, more resistant and less subject to retraction. The conditions laid by Reverdin were as regards soil, that the raw surface should be granulating and the subject fairly healthy; and as regards graft, that it should be small and merely epidermic. On this last point there has been some divergence of opinion, some retaining that the malpighian layer should be necessary, others that the stratum granulosum would be quite sufficient, but all agreeing in excluding from the graft the derma proper. The experience of 18 years has proved abundantly that the aims of Reverdin have been fully obtained, but it has also made clear to the surgical mind that this invaluable method does not meet all cases. In its best, the result of it is to repair loss of skin by cicatricial tissue, and there are cases where this—no matter how good and how superior to the one obtained by the unsaid efforts of nature—is not enough to compensate for the loss of the true skin.

There are wounds and ulcers near the eyes and nose, burns and sloughs of injured skin near the large joints, and in the palmar and plantar surface of hands and feet, where cicatricial tissue would seriously interfere with the functions of the affected part, or would mar the appearance in a too evident way. To Ollier is due the priority of having made an attempt to repair suitably such difficult cases. As far back as the year 1872\* he

presented to the Paris Academy of Medicine cases in which flaps of skin from half to eight square inches in size had been cut from a distant part of the body and transplanted over the denuded surface, followed by complete union and survival of the transplanted skin.

In contrast to Reverdin's epidermic grafts, he named his, *dermo-epidermic*. To make his method generally accepted by surgeons, one thing was wanting to it, and that was certainty. Failures in the attachment of the *dermo-epidermic* grafts were too numerous to justify the non-indifferent loss of skin in various parts, and the disturbance attached to it. An important modification in Ollier's method was introduced in 1881 by Dr. Wolfe, of Glasgow.\* As an oculist he had to provide for cases of extreme ectropion due to cicatricial retraction. In one of these, the result of a burn, he dissected the old scar away; then, having taken the shape of the flap required with a piece of lint, he carefully dissected a piece of skin from the forearm, cutting it larger than necessary all round to allow for shrinking; then, instead of applying it straight off to the raw surface—and here comes in his important innovation—he turned up its deep surface, and, with a pair of flat sharp scissors, he pared off every vestige of subcutaneous tissue, so as to leave the surface of a pure white colour. It was then applied to the gap in the eyelid, to which it was united by fine silk ligatures. The dressings were water dressings. Perfect adhesion took place, only a small portion of the inner segment of the cuticle becoming slightly elevated.

The careful paring of the subcutaneous tissue, by removing all interference in the establishment of circulation between the vessels of the raw surface and the derma of the transplanted skin, makes adhesion almost a certainty. This method has been adopted in general surgery, and Prof. Esmarch† has recorded a series of his cases in the *Lancet* chiefly concerning defects of skin in the face. These varied from 1 c.m. to 5 c.m. in diameter, and out of 13 cases only one resulted in entire failure, owing to a very unfavourable condition of the patient's skin. Of the other 12, some entirely healed at once, and the transplanted flaps differed from the neighbouring skin only in retaining for some time a paler colour. In most cases there were exfoliation of the cuticle and of small spots of derma, but without in the least prejudicing the successful result of the operation.

Parallel with Wolfe's, or as an evolution of it, we have another method, and that is Thiersch's. At first glance it would appear that between the

two there is a distinction without a difference, but on fuller scrutiny I find that the Leipzig Professor, by careful study of all conditions apt to favour the successful transplantation of skin, has framed a set of rules by which his method assumes a character of its own, and becomes a valuable addition to surgery. These are briefly as follows:—\*

The best parts to take transplants from, are the anterior surface of the forearms and thighs. These should be previously well washed and disinfected, but once the operation is begun all disinfectants should be abandoned, as they interfere with those delicate processes by which the blood is enabled to penetrate in the vessels of the transplanted skin and thus nourish it. The only solution used is one of chloride of sodium of the strength of 6 per 1000, previously sterilised by boiling. The loss of substance, contrary to Reverdin's method, does not require granulations. In recent wounds it is sufficient that all bleeding should be stopped. In granulating surfaces the flabby granulations and the margins should be well scraped, then the bleeding stanchied by irrigation with the chloride of sodium lotion, and by pressure with a pad of cotton wool soaked in it. The most favourable granulations are those of about six weeks' growth, having undergone for a while a checking treatment by means of caustics or compression; recent granulations with copious secretion are absolutely unfit.

The flaps of skin, as a general rule, can be cut without the use of Esmarch's bandage. They should be narrow, not wider than 2 centimetres and as long as 10, although Socin† has recorded a successful case in which they measured 24 x 4 centimetres. The instruments recommended are a razor or a microtome, thoroughly clean and free from all fatty substances. In cutting, the skin should be kept tightly stretched and the blade pushed along by a slow sawing motion. The flaps should be thin, but should include both the papillary and the reticular layer of the corium. On separation of the flap it must be spread over the prepared surface without any delay, and due attention paid that it should be laid out smoothly. If several flaps are required, these are laid alongside one of the other.

The dressings consist of strips of protective over the margins, of cotton wool soaked in chloride of sodium solution, and of another layer of protective, the whole to be fixed by a starch or gauze bandage. The dressings are changed every day. Out of the 78 cases that Thiersch has

\* T. A. Wolfe on Diseases and Injuries of the Eye; page 419.

† The *Lancet*, June 8, 1889; page 1131.

\* Archiv f. Klin. Chir., Bd. XXXVII., p. 63, 78, and Ctbl. f. Chir., n. 49, 1888.

† *Lo Sperrmentale*, July, '88; page 69.



operated, 17 were recent wounds, 61 granulating surfaces. A good result was obtained in 58, a partial in 12, and in the remaining 8 the operation had to be repeated.

\*Another departure in skin transplantation was brought forward by Mr. John Croft at the last May meeting of the Royal Medical and Chirurgical Societies. He there advocated that large flaps of skin should be used, and that the operation should be divided in two parts. In the first, a comparatively large strap of skin is raised and dissected all through its length, but is left attached at the two ends. It is carefully dressed and kept for a fortnight raised, so as to obtain good vascularity in its lower surface. At the end of that time the two attachments are severed, and it is moved and fixed to the position which it is permanently to occupy. Mr. Croft showed photographs of 5 cases operated in this way, and Mr. Bryant pronounced them too successful to be criticised. This method appears to me to be the old Tagliacotian autoplasty, with the difference that the pedicles are two, and that instead of one being left, both are separated, and the strap removed to a distant part. Notwithstanding the success of Mr. Croft, I do not think that his operation will be so generally adopted as Wolfe's or Thiersch's, on account of the pain and prolonged disturbance attending the cultivation of the flap for a fortnight; but at the same time, I believe that it will find its place in surgery. The greater thickness of Croft's straps, and the fact that, differently to Wolfe's or Thiersch's transplants, they will contain hair follicles and sudoriferous glands, will make them preferable in certain cases.

In the rapid glance that we have given, we have learned various different ways of getting skin; the question now comes where to get it, if under certain circumstances, we were to run short in our supply of material. Not always is the patient in a fit state to endure much removal of skin, or is he surrounded by healthy friends willing to give him some of theirs, or too much skin might be required all at one time to be easily found. Animals have been utilised for this purpose, and ever since Reverdin's first days their skin has been tested and found to answer well. The list of those used is too long to quote. Suffice to say that even the pig has been utilised in 1877 by Mr. S. F. Raven,† who took from him a score of grafts to supplement 800 human ones, in the treatment of a large ulcer following a burn, and they proved excellent. Both mammals and birds

supplied us with their skin for grafts and transplants, but only in the year 1884 was a member of the reptile class first utilised for this purpose.\* Dr. Allen, of Durham, found that bits of skin from a decapitated frog made grafts which admirably answer all purposes for Reverdin's method, claiming the advantages that the skin of a single frog yields grafts for an enormous extent of surface, and that it preserves its vitality so long that if the patient is at a distance, the portion of the skin required can be carried by a surgeon in his pocket for an hour or more, without injury, provided it is wrapped up in gutta serena or other waterproof tissue to prevent drying. Another advantage of it is that it will succeed in cases where human skin fails. In proof of it I will quote you the following case:—†Prof. Morales Perez tried in a case of burn of the hand, where human skin had failed, frog's skin. Three quadrangular grafts, 2 centimetres wide by 8 long, were first applied, medicated wool and iodoform ointment being the dressing used. After five days these grafts were found to have adhered well. After some days the epidermis and the blackest green pigment of the graft dried up and detached in fine scales, leaving a thin white cicatrix. Finally, a very satisfactory elastic cicatrix was obtained, the line of the grafts being visible.

Objections might be raised to animals' skins, especially in cases of transplantation, on account of the different appearance, or as a matter of sentiment, there being a case reported in which a successful dog's transplant was condemned on theological grounds.‡ In such cases skin might be obtained from the cadaver, and, as a proof that such a thing is possible, here is the following case published by Dr. Bartons, of Rhodi:—||

"On the 21st October, 1887, a lad 16 years old, employed in a brewery, was severely burned by boiling beer. Dr. Bartons saw him eight days after the accident, and found that the skin on both feet, with the exception of the plant and the toes, had been deeply destroyed, and that the destruction extended up both ankles and legs to 6 centimetres above the malleoli. The ulcerated surfaces were bathed in pus, and extremely painful. Under the use of iodoform, creolin, etc., a certain amount of cicatrization took place, but after a time this came to a standstill. Dr. Bartons then resolved to adopt skin transplantation, but on account of the exhausted state of the patient he could not take the necessary material

\* *The Lancet*, 15th November, 1884, page 875.

† *Lon. Med. Rec.*, 1886, page 442.

‡ Ashhurst, *Encyclopedia of Surgery*, vol. I., p. 541.

|| *Deutsche Medicinal Zeitung*, 24th September, 1889.

\* *British Medical Journal*, 18th May, 1889; page 1114.

† *Brit. Med. Journal*, 1877, vol. II., page 623.

from him. There died at that time (19th December), from pyæmia, a lunatic, 70 years old, and from his legs, 20 minutes after death, two large flaps of healthy skin were dissected. These were at once put in a warm solution of chloride of sodium, then brought in close proximity of the patient, and there had all the adherent adipose tissue completely removed. They were then divided in bits, 1 c.m. long and  $\frac{1}{2}$  1 c.m. wide, and then placed on the ulcerated surfaces, which previously had been thoroughly washed with warm water. The dressing was iodoform and cotton wool. Each foot received the transplants, and the operation lasted one hour. At the first dressing, six days after, it was found that 12 pieces in each foot had taken good hold, whilst the other two in proximity of the malleoli had come off with the dressing. Of the pieces attached some had a dirty colour; others looked well. On the second dressing, the tenth day, all had assumed a good appearance, and from that time cicatrization proceeded speedily to the end. The new cicatricial tissue was so lax and pliable that the feet could move in all ways without any difficulty.

This case, whilst excellent, should not be too closely copied as regards the selection of the cadaver, for fear of meeting with less fortunate result. A younger man, and not dead from septic disease, should be preferred.

One of the latest developments of skin transplantation is to cover ulcerated malignant growths which are too extensive to be removed, and thus save the patient from the evil of the foul-smelling discharge.

Dr. Krask, of Freiburg, reports in the *Munchen Medicinische Wochenschrift* for January 1st, 1889, a case of carcinoma of the breast, in which the neighbouring skin was involved to such an extent as to render an operation useless. For the same reason it was impossible to secure a flap of healthy integument with which to cover the ulcerated surface. So, after cutting away as much as possible of the cancerous tissue by means of a knife curved on the flat, he covered over the freshened surface with numerous skin grafts taken from the arm of the patient. These places all adhered, and soon the ulcer had entirely healed, the cancer "*apertus*" being thereby converted into the much more endurable cancer "*occultus*," and the patient having obtained a short period, at least, of relief from her most troublesome symptoms.

Cases of cancer in which removal is not advisable leave the medical man in such a useless and humiliating position, that any measure likely to afford relief either from pain or apt to elevate the feelings of the patient, may be acceptable, but it will be a questionable kind of surgery, and will require judgment and discretion in its adoption.

## SEWERAGE WORKS FOR THE WESTERN SUBURBS.

REMARKS ON THE SO-CALLED SEPARATE SYSTEM OF SEWERAGE MADE BY DR. J. ASHBURTON THOMPSON AT THE ANNUAL MEETING OF THE ENGINEERING ASSOCIATION OF NEW SOUTH WALES.

MR. PRESIDENT, I thank you for your invitation to join in the discussion this Association has initiated on a most important subject. I have read Mr. Henson's communication with great care and close attention, and I find that he deals with a good many technical points very fully. Upon these I have not the least intention of saying much; but his criticisms are so sweeping and so energetic—in some cases, even so novel—that I must mention one or two of them, which, in fact, pass my comprehension.

\* \* \* \* \*

There are other points to which I take exception, but I conclude that as far as I am concerned—as far, that is, as it is suitable for me to join in a discussion between civil engineers—the paper before you resolves itself into an advocacy of the separate system. Now, Mr. Henson concludes with a very judicious remark. He observes that it will not be safe in planning sewerage for Sydney to trust too much to English practice. I entirely approve of that, as must every man with the least pretension to thoughtfulness. English principles—the principles of engineering science as they are taught by English professors—those are applicable all over the world, for they are deduced from a right appreciation of natural laws. But English practice merely exemplifies the manner in which English professors are guided by those universal principles under the special circumstances in which they work. Those circumstances are, in very many respects, different to ours, and the separate system finds in them much to recommend it. But Mr. Stayton has just considered our circumstances, and after deliberate study he has rejected the separate system, and has adopted the partially-separate plan. This—unless, indeed, Mr. Henson is prepared to show that Mr. Stayton has not given the matter careful and intelligent consideration—this course, I say, one would expect to meet with the approval of a gentleman who crowns his essay with the sentence just quoted. But it does not, and, in fact, he falls into the very error which he points out for avoidance.

I wish to be quite clear; and I must therefore ask you to excuse me if I define the sense in

which I use certain expressions. By the word "sewer," then, I understand a conduit to carry off liquid filth; by "drain" I mean a conduit designed to collect liquid of which filth is an accident; by "separate" system I understand the exclusion from sewers of all clean water, whether that be rainfall, or water from land; and by "partially-separate" system I understand that plan by which the greater part of rainfall, surface-water, &c., is excluded from sewers, but by which a small proportion is admitted to them. Those are the meanings usually attached to the several expressions, and it is necessary to bear them in mind, for a very great deal of tedious argument would have been saved the world had they not too often been forgotten. Now the separate system finds its chief advocates in England; they first appeared there, and not less than forty years ago, in the persons of the late Mr. J. O. Ward, and of Sir Edwin Chadwick. You are acquainted with Mr. Ward's aphorism, "the rainfall to the river, and the sewage to the soil." It is an excellent aphorism, sound in principle. We are, I do not doubt, to go as near realizing it as we may; but we can only do what is possible—we work under limitations. What gave rise to this idea? Why, the circumstances of the country suggested it; the laws, the physical configuration, the moist and cold climate of England. 'Until about 1813, you will remember, it was penal to turn sewage into drains; and then as population increased it was found absolutely necessary to provide for sewage, and in 1847 it was made penal on the contrary, not to turn sewage into those drains. But the majority of the important towns of England stand on rivers; and the consequence of turning sewage into surface drains which very properly fell into the rivers was that presently pure drinking water was hardly to be got. Hence the Rivers Pollution Commission and its several reports; and thence the enactment under which it became penal to turn crude sewage into rivers—the enactment under which, in fact, it once more became penal to turn sewage into drains. Then local authorities being compelled to bring their sewage to a certain degree of purity before they could get rid of it by means of natural channels—of the rivers—all that long and expensive series of experiments on the practical scale began, which yet are far from being concluded, to ascertain the best, speediest, and cheapest way of effecting the necessary purification. These soon showed that there were but two plans worth serious attention—precipitation and filtration; and while it was at last found that the best effluent could be got only by a combination of these two, it was learned that the filtration could be sufficiently well done

by a plan which allowed of the use of the sewage as a fertilizer. Then a new problem presented itself, namely, how most money could be made out of sewage by farming, and how the heavy expenses incurred by local authorities could be best lightened. But, you see, as soon as sewage farming became a feature in the sewerage schemes of those authorities, as soon as they began to look to the farmer to lighten their expenses, the latter became a factor in the problem, and his convenience had to be consulted. He found that he could not utilize the immense volumes of combined sewage and drainage which in that cold and moist climate were brought to the farm by the combined system. Besides, to reduce even expenses out of pocket, or the cost of constructing the conduits, it became necessary to reduce the volume. Hence, in towns to be newly sewered, systematic attempts began to be made to exclude drainage; so that the farms—or I may even add, the filter-beds—instead of receiving variable quantities of fluid, often in quite unmanageable volumes, might receive a nearly steady flow of sewage of tolerably constant constitution, and so that the farmer might get a chance to raise his crops with reasonable certainty. These, in fact, are the considerations which led to the prosecution of the search for an effectual means of separating drainage from sewage; and they are considerations to a large extent not furnished by our conditions. Now, I may be thought, thus far, to have referred to rainfall alone in speaking of drainage; and, at all events, I have not yet specifically mentioned sub-soil waters. But it is not the rainfall alone which, on the combined system, dilutes sewage. England has a smaller rainfall than we have; but the manner of its fall is vastly different. It falls so that the tendency is to keep the subsoil saturated; and since not all that falls finds its way into the ground, for, even in England, the loss by evaporation is very considerable, that saturation is there ensured by defect of heat. Are our circumstances, then, so similar to these that we should advocate the separate system here, merely because it has much to recommend it there? I think not. We have—I speak of the neighbourhood of Sydney, which is the area to be sewered—for the most part a comparatively shallow soil, which overlies the sandstone and the shale; we have a country of good surface grades, consisting in part of a series of anticlinal ridges, with ample falls by valleys to the sea; we are not environed by rivers, and we have a sun which sometimes we think almost too brilliant, too constantly seen in his splendour. Under these circumstances we are not at all likely to be embarrassed by the excessive volume of our sewage as compared with our cultivable area.

We may safely reckon on evaporation for much. Our climate—I do not say our soil—is more like that of Italy than of England; and perhaps the difference may be pointed by a reference to sewage farming as it has for very many years been successfully carried on at Milan. There no attempt is made to separate drainage from sewage. The sewers converge to an open canal called the Vettabbia, and thence the sewage is drawn off to the surface of about 4000 acres of land arranged for broad irrigation, which for very long it has fertilized in a remarkable manner. Notwithstanding the extremely dilute character of the liquid, it is actually possible, from time to time, to pare down the surface of several meadows—not to preserve the levels, but in order to sell the parings which are carted away as manure to more distant estates. There, then, in that climate which so much resembles our own, evaporation is so free that it has never seemed necessary to seek a modification of the combined system, which, however, I am far from advocating. We have, I say, a climate, and we are to make use of a soil, which render the dilution of our sewage of small consequence; we are better placed in these respects than the Milanese, successful as they have been; and how much more fortunately situated than the people of Berlin! Yet the new sewers of that city are calculated to carry off a rainfall of five-sixteenths of an inch per hour, and that although every drop of it has to be raised to a vertical height of no less than 38ft. before it can run onto the several farms. I believe that I have now said enough to show that the choice between the separate and the combined systems is one which must be guided by the circumstances of the place to be sewered; that like a good many other things which, here, we have to decide upon for ourselves, it is not by its essential qualities absolutely good or absolutely bad, and therefore is not to be advocated merely because it has been found suitable to some other different place. Thus, in fact, it happens that at Portsmouth, where the area to be sewered is in small part raised, and in a larger part is below the level of ordinary spring tides, actually within this one area—in the very birthplace of the separate system—both the partially-separate and the combined systems are exemplified. For it was thought necessary to relieve the lower levels of the surface water running off the higher level, and therefore, to the sewers of the latter, all surface waters were admitted; but, as the sewage from the lower level had to be pumped, it was thought desirable, there, to exclude *as far as possible* all rain water from the sewers. That appears to me to be a truly scientific application of principles, and to form a striking contrast to a

course which involves the irreflective adoption of mere practice.

It is to principles that I have thus far addressed myself, but even at the risk of being tedious, I cannot sit down without saying something upon the degree of separation which hitherto has been found practicable. I concluded a sentence just now by observing that the separate system should not be adopted here just because it has been successfully employed elsewhere. But what do I say? Has it ever been, not successfully employed, but has it ever been found possible anywhere? I do not know of any place in area and population at all resembling Sydney where it exists\*; I will, however, repeat what is said by some of its advocates. You are acquainted, I have no doubt, with the name of Mr. Lemon, and perhaps you know that the city of Winchester, sewered by him, is often referred to as an example of the working of the separate system. Well, here is what Mr. Lemon said about Winchester at the Annual Meeting of the Association of Municipal and Sanitary Engineers held in London. He said:—"In the city of Winchester there is not a single gully connected with the sewers . . . some people called that the separate system, but he said it was nothing of the kind. It was impossible to prevent houses being connected with the sewers in all directions, or to prevent houses being drained into the sewers in all directions. If they carried out the separate system in its integrity, they must have a double set of conduits, and that, in his opinion, was an absurdity and could not be carried out." And again he said—he is often regarded as a main advocate of this system—"He had little difficulty in carrying out the separate system, and it is astonishing how that system is growing . . . but he had not yet been able to keep the water of back-yards out of the sewers, and did not consider that practicable." So, also, Mr. Angell at one time Borough Engineer for Portsmouth, said:—"The separate system can of course only be carried out in its general features, and not in every detail. It would be a mistake to have a duplicate set of drains to each house; back-yards would usually drain into sewers, but for

\* In the States, Colonel George E. Waring, Junr., is the exponent of the separate system which he has successfully carried out as regards sewerage in several comparatively small cities. The characteristics of his works are briefly as follows:—Exclusion of all rain-water which is to run over the surface to gutters, &c., what sinks into the earth in yards, &c., being carried off by drain-tiles laid with the pipe-sewers—small size of sewers, 4-inch house-connections, 6 to 8-inch sub-mains and laterals, and so forth; special care to secure solid jointing, and to prevent subsidence; and automatic flush-tanks at the head of all lines and some other points. He thinks this plan more useful than the partially separated system, "especially in small towns, and in towns where the question of disposal is a difficult one." But those whose business it is to understand this question cannot consider themselves fully informed upon it until they have studied Colonel Waring's valuable exposition of his views and executed works. He has rendered very great service to the cause of Public Health.

the most part roofs can be drained into road-channels or surface-drains. About 90 per cent. of surface-waters can be diverted without causing difficulties of details." Professor Robinson is an eminent authority on all matters of sewerage, and this is what he says of the separate system:—Its advantages appear chiefly where sewage is disposed of by irrigation, and where it is absolutely necessary to lift sewage by pumping. For irrigation it appears desirable to have sewage as concentrated as possible; but when pumping is unnecessary, dilution within certain limits is not detrimental. A duplicate system involves greater cost." Some of these objections have but little force here. As I said before, we are not in danger of fouling streams from which drinking water might be taken, and it would, in my opinion, be a mistake to consider our extended road-surfaces from just the same standpoint as the proportionately less extensive and fouler road-surfaces of England. With proper catch-pits intervening there can be no objection to the passage to the harbour of such surface water. I don't wish to continue these quotations with which most of you are doubtless already familiar, but I cannot conclude them without repeating the following lines from Mr. Denton's invaluable work. "If," he says, "we recognize, as we certainly ought, a difference between towns situated in districts of rapid inclinations, impervious surfaces and heavy rainfalls, and those where the reverse conditions prevail, it will be considered advisable to admit into the sewers of the former only such rains as fall on the back parts of dwellings, on impervious surfaces so situated that there would be a difficulty in connecting them with any system of surface drainage, and on those streets and courts which, from their position, collect refuse almost as foul as sewage itself. In the latter, having flat inclinations, porous surfaces and smaller rainfalls, it is better to admit such additional quantity as may be advantageously turned to account in flushing."

I conclude my quotations with this one, apologising to you indeed for detaining you to hear their twice-told tale. Now, what do they amount to? Why they amount to this: That the separate system is a practical impossibility, however desirable it may be thought on theoretical grounds. Whenever an author speaks of the "separate system" you may find that he is speaking loosely, and that, in fact, he means the partially-separate system. The difficulty is a purely practical difficulty, and although it is inadvisable, for a hundred different reasons, to admit all waters to sewers, it is not possible either to exclude all. As for subsoil waters, you know

that unless you lay pipe sewers with special joints, and in the same excavation a special drain for them, you cannot entirely keep them out. This, however, should always be done; pipe sewers should have either a good foundation or a good support, very carefully made joints, and a line of drain-tiles along side or combined with them in one piece.

But as for rain water, although the greater part can easily be excluded, the exigencies of house building simply render it impossible to keep the whole of it out. In the latter case there is also the difficulty which arises under the general heading of working-errors. The separate system demands a double set of conduits, and a double set of yard gullies. Besides the very great expense of the former, there thus arises an intolerable confusion beneath the soil of the two sets of pipes; and in the very few places where these have been laid it has been found by practical experience that even authorized workmen inevitably confuse the two and from time to time connect the sewers of houses with the drains and *vice versa*. And then in respect of the two yard gullies you import into the elaborate scheme the domestic servant, and place it entirely at his mercy; for wherever yards are already formed they are so graded that any gully to take their water must be placed next to the present gullies, which are purposely so placed as to serve both for sewerage and yard-drainage, unless you are prepared to cause all the yards to be relevelled. Now I have drawn illustrations on other points from several different parts of the world; but on this I believe I need not go further than our own Surry Hills. I ventured to find fault with Mr. Henson just now for not availing himself of the opportunity of watching the action of a syphon as it may be watched in Sydney; and now I must ask Mr. Trevor Jones, who I see supports Mr. Henson's views, why he did not detail to the Association his own experience of the working of the separate system as instituted by himself at Surry Hills? For, sir, although you may not know it, Mr. Jones, with the courage of his opinions, has initiated the separate system in this very city; and I want him to tell you whether it is not the case that in the district mentioned there are to be found in back-yards two gullies side by side, and whether it is not the case that those two gullies are confused in the manner I have just suggested, so that, although the houses I refer to are sewerred, sewage from them not infrequently still finds its way by the drain to the road gutter?

I am afraid that I have addressed you on this subject at unconscionable length; its importance must be my excuse for one part, and for the rest its inherent difficulty. The drift of my argument

has been first to show that the separate system has been advocated in England to meet that country's special requirements; secondly, that our circumstances differ from those to an extent and in a manner which renders it unnecessary to seriously consider the separate system here; thirdly, that the separate system is deemed by the best practical authorities to be impossible of execution, and, as a matter of fact, is carried out in no city at all resembling ours in the matters of area and population; and lastly, that the partially-separate system is generally recommended, practicable, economical, and wise. But then the partially separate system is exactly what Mr. Stayton adopts. "About 90 per cent. of surface water may be diverted without causing difficulties of detail," says Mr. Angell. Well, Mr. Stayton proposes to divert exactly that amount over a part of his area; and over the rest he diverts 85 per cent. In short, he adopts the approved practice.

#### CASE OF COMPOUND COMMINUTED FRACTURE OF FEMUR AFTER GUNSHOT WOUND.

BY ARTHUR E. SALTER, M.B., ET CH.B.,  
GOVERNMENT MEDICAL OFFICER, THURSDAY ISLAND.

G. H., aged 37, was brought from Port Moresby, British New Guinea, into Thursday Island, on the 22nd November, 1888, suffering from the accidental discharge of a heavy revolver loaded with a rifle cartridge.

The revolver had exploded while he was holding it in his right hand, he being about to put another cartridge into it. The muzzle pointed downwards and outwards. Patient was clothed in a pyjama suit only. The accident happened upon the 14th of November at Kupa Kupa, some distance from Port Moresby. During the time intervening between the accident and my seeing him he was without medical treatment, and had been carried from Kupa Kupa to Port Moresby on a spring mattress by relays of New Guinea natives, the journey occupying six hours. He was then for some days on board a small cutter sailing to Torres Straits from B. N. G.

Patient is a very well-built, robust man, and on a superficial examination a bullet wound was seen on the anterior surface of the thigh, about the centre of the limb. The leg was much

swollen, and below the seat of fracture was twisted inwards, and was about 8 inches short. There was no wound of exit. On manipulation the bone was felt to be in several fragments, apparently being all in pieces below the wound. The condyles of the joint, however, worked smoothly upon their surfaces, the tuberosities were not moveable from each other, and the popliteal artery could be felt pulsating distinctly. There was a watery, unhealthy-looking discharge oozing out of the wound, and the temperature was 101·4.

As soon as patient was ashore he was anesthetized and the wound explored. It tended downwards and backwards. There was a well-defined track through the bone leading to behind the external tuberosity. I could feel nothing at the bottom of the wound. No further immediate attempt was made to find the bullet. The limb was put up in a long splint. Patient was kept quiet for one day. On night of 23rd his temperature was 101·4, pulse 100, and he suffered great pain and did not sleep although 40 grains of chloral hydrate were given.

24th.—Wound was syringed out with a 1 per 1000 solution of perchloride of mercury, and a long splint applied.

26th.—Searched carefully to discover the bullet, if possible, patient being under chloroform. Put on sandbags for extension, as there was some shortening.

27th.—Slept better, pain was less; temp. 100·6, pulse 90.

30th.—Complains of great pain.

Dec. 1.—Complains greatly of the pain which the extension causes at the back of the knee; temp. 100·2, pulse 94.

Dec. 3.—Had a consultation with Dr. Zander, of Russian man-of-war Naverzdnik, who counsels making no more attempts to search for bullet, and to use the perchloride solution 1 in 2000 instead of 1 in 1000.

Dec. 9.—As before, temp. always above 99, but to-day he says the weights are causing great pain behind the knee.

10th.—Complaining greatly of pain behind the knee. Gave liq. op. sed.  $\text{m}$  xl.

11th.—Slept better; still has the pain behind the knee. Temp., 100·2. Discharges have remained sweet. Took all the splints off with a view of stopping the pain, and examined the condition. Find some attempt at union appearing. Find no cause for pain.

12th.—Not sleeping. Gave liq. op. sed.

13th.—Did not sleep, notwithstanding liq. op. sed., and I shall give up the extension presently if great pain still persist, as he is ceasing to eat his food. Temp., 100·8; pulse, 95. Liq. op. sed.,  $\text{z}$ i in two doses at intervals of six hours.

15th.—Not very much sleep and great pain still. Gave up the extension to-day. The shortening is about an inch. Temp., 101; pulse, 100.

18th.—Sleeping well. Temp., 100·8; pulse, 98.

24th.—Temp., 98·4.

28th.—Some pain in the knee to-day. Temp., 99·8. Knee appears rather red, and I have determined to incise the back of the knee joint and search for the bullet.

31st.—Made incisions over posterior of both tuberosities. Some watery fluid came out, but I could feel no lead.

Jan. 12 (1889).—Passed a good night. Temp., 100·4; pulse, 108. Anæsthetized him, and explored the opening made over outer tuberosity, taking away a piece of bullet.

18th.—Again examined with probe, and extracted a piece of bone with great difficulty.

21st.—Again explored wounds and took away a piece of bone, and felt what I took to be a piece of bone wedged fast in the new bone which has been thrown out.

23rd.—Tried to-day to remove this piece of bone. I find it is very difficult work keeping patient under chloroform and scooping into the bone at the same time. I could not get it away, and put him up on a long splint to await another surgeon's arrival at Thursday Island. The weather is excessively hot, which troubles him greatly.

From this time out he remained about the same. I took some more fragments of lead away. Several fragments of bone were also removed, and several pieces came away in the discharges. On the 28th of March Dr. Marshall anæsthetized him, and I removed the piece of bone I had tried to previously.

8th April he placed his whole weight upon the limb and returned to N. G.

I have since heard from him. The wounds still discharge, and pieces of bone still come away.

The value of this case seems to me to rest in the fact that the necessity for amputation did not appear, although from the circumstances which surrounded it at first there was every probability that the limb would be lost. The carriage of the man for six hours by natives without the superintendence of a surgeon; the plunging and buffeting of a small cutter in the Papuan Gulf, where there is generally a large sea, and the loss of time all added to the gravity of the injury, put me in great doubt on first seeing the patient whether it would be wise to try and save the limb. On the other hand, his good constitution and the patency of the popliteal were in his favour, and I am glad to say the result was a happy one.

## PROCEEDINGS OF SOCIETIES.

### SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

MONTHLY meeting held at the Adelaide Hospital on August 29th, 1889. Present—Drs. Davies-Thomas, Clindening, Morier, Baly, Sangster, H. H. Wigg, Verco, Ewbank, Cawley, T. K. Hamilton, Lawrence A. A. Hamilton, Gardner, Hynes, Cookson, Hayward, Stewart, Jay, Mitchell, Marten, Symons, and Poulton (Hon. Sec.)

DR. DAVIES-THOMAS, in the absence of the President and Vice-President, was voted to the chair. An apology was received for the absence of the President (Dr. Cleland.)

DR. T. K. HAMILTON exhibited two cases of Rupture of the Sphincter of the Iris.

CASE No. 1: L. W., female, aged seven years. About 18 months ago was accidentally struck by the branch of a tree on the left eye, and this was followed by acute pain and great swelling of the eye, accompanied by loss of vision. The latter has been noticed as defective ever since, but it is only quite recently that her mother's attention has been attracted to the eye, when she noticed that this pupil was not clear, like the other.

On examination: Cornea found quite clear, and no evidence whatever of there ever having been any injury to the exterior of the globe. Small rupture of the sphincter iridis at the outer part, and a little above the middle line. This, during moderate dilation of the pupil, measures 1·5 m.m., but apparently causing no consecutive pupillary enlargement. Lens and capsule, both more or less opaque, so as to prevent any reflex from the fundus being obtained. When pupil dilated with atropine (which can be done up to about 8·5 m.m.). The rupture of the sphincter appears only like a little breach of the continuity of the pupillary margin, just above this point between the iris and the lens capsule, and uniting the two together, is seen a small dark mass, measuring about 3 x 2 m.m. This is, probably, an organised blood clot, with uveal depositions on it. From the synechia above to below the centre of the pupil the capsule of opaque—the lens itself is more or less opaque all over, and there are darker striae to be seen radiating from the periphery all round, the whole presenting an appearance more like that of a "zonular" than a "traumatic cataract," but, possibly, a process of lens absorption is proceeding, and has already become more advanced in the clearer portions. There is a fairly good reflex of the fundus obtainable through the periphery of the lens, T + 7 V—fingers at 1 metre (atropine).

CASE No. 2: B. T., male, aged 28 years. Has always been shortsighted. About 10 years ago got a blow on his left eye from a piece of limestone, which made him blind on this side for several days, and it was quite six months before his vision became at all good. He thinks he can now see almost as well as he could previous to the accident.

On Examination: A rupture of the sphincter found in the lower margin of left pupil about 2 m.m. wide (when pupil moderately dilated) and extending into the iris, radially, about the same distance, the lower part of the tear being filled up with lymph. This pupil acts as quickly as the other, but there is some consecutive dilatation, as follows:—

i. In dull light:—Left pupil about 1 m.m. wider than the right.

ii. In strong light:—Right 2·5 m.m. Left 3 m.m.

iii. During maximum convergence, and accommodation. Both pupils quite equal—3 m.m.

iv. With cocaine:—Left dilates much more readily and more quickly in a given time than the right.

No synechia and other traces of iritis, and no signs remaining of any external injury of the globe having occurred.

Lens clear, and both reflexes apparent. T normal.

Refraction: Right—M. As.

Left—C.M.As.

Vision—

Right  $\frac{3}{8}$  J. 1 at 13 c.m.

cum.—4D.Cyl. Ax. horiz  $\frac{3}{8}$ ??

and J. 1. at 22 c.m.

Left  $\frac{3}{8}$  J. 1. at 11 c.m.

cum.—1D. Sp combined with

—4D.Cyl. Ax.  $15^\circ$  up-and-out-wards  $\frac{3}{8}$ ? and J. 1. at 22 c.m.

Rupture of the sphincter iridis is not of very frequent occurrence, though Hirschberg says this lesion occurs in all cases of traumatic mydriasis. As I happened to have these two cases under observation at the present time, and as each of them possesses special and distinct features of interest, I thought them worth showing.

In case No. 1 I would specially note—

i. The entire absence of any injury to the exterior of the eyeball.

ii. The absence of consecutive dilatation of the pupil.

iii. The radiating striae in the lens.

and in case No. 2—

i. The absence of any external injury here, too.

ii. The absolutely clear condition of the cornea, lens, etc.

iii. The existence of vision nearly equal to that of the other eye; this, after so grave an injury, is, I think, remarkable.

#### POLYPOID GROWTH FROM THE CONJUNCTIVA OF THE UPPER LID.

J. M., female, aged 12 years; no history of anything wrong with the eyes, except the usual inflammatory condition often seen during an attack of scarlatina, which she had five years ago, until about a week since, when her left eye commenced to bleed suddenly, and the same occurred again in two days afterwards, the hæmorrhage being considerable.

On examination, a sloughy mass seen projecting just below the inner part of the upper lid of the left eye, and, on eversion, a growth found springing from the conjunctiva, about the middle of the tarsus and a short distance from the inner canthus. The growth is polypoid in appearance, is pedunculated, measuring about 5 m.m. at the neck and 9.5 m.m. along the crest, and it bleeds very readily.

Polypus of this portion of the conjunctiva must, I think, be of extremely rare occurrence. Seed growths are usually found in the eye in connection with the caruncle. I have never before seen, nor can I find, any such case recorded in which a polypoid growth appeared on this part of the palpebral conjunctiva.

DR. GARDNER shewed a man on whom he had operated for tumour of the bladder by suprapubic incision. The prior examination of the case by cystoscopy had demonstrated many difficulties due to the presence of blood in the urine.

DR. HAYWARD shewed a little boy, the subject of diffused warty growths of the trunk and extremities.

DR. LAWRENCE exhibited a lady's hat-pin which he had removed from the urethra of a man. It had been

introduced by the patient for supposed urethral obstruction.

The minutes of the previous meeting were read and confirmed.

DR. POULTON read a memorandum, issued jointly by the Medical Society of Victoria and the Victorian Branch of the British Medical Association, concerning the proposed bill to amend the Medical Practitioners' Statute, 1865 (Victoria.)

The meeting resolved, on the motion of Dr. Verco, that the Editor of the *A. M. Gazette* be requested to print the memorandum for the information of the profession.

DR. HAYWARD moved, and Dr. Gardiner seconded, that the Council be requested to carefully consider the memorandum and the desirability of calling a meeting of the profession to take up the question of medical legislation. Carried.

MR. F. E. C. SINGLETON, L.R.C.P. et S. (Edin.), Glenelg, was elected a member of the Association and its South Australian Branch.

DR. SANGSTER read the following paper on

#### INFECTIOUS PNEUMONIA.

By JOHN I. SANGSTER, M.R.C.S. ENG., L.R.C.P.

EDIN., SURGEON TO THE BURRA HOSPITAL.

DURING the winter of last year a series of cases occurred in my practice, which to me were of so unusual a character that I thought it might be advisable to bring them before the notice of the Association, hoping that some light may be thrown upon the etiology of a disease which appears to be but little understood.

The following is an epitome of the notes taken at the time of attendance:—

W. H. P., æt. 34, a strong, healthy man, a total abstainer, consulted me on July 19th, 1888, for what he supposed to be a cold. He had been ailing for a day or two, and complained chiefly of headache, muscular pains and loss of appetite; there was a slight rise of temperature. On the 22nd I visited him at his home. I learnt that on the two previous days he had been so unwell that he was obliged to remain in bed. The symptoms were much the same, but the headache was more severe. I noticed that there was a spasmodic cough; the temperature was  $102^\circ$  deg.

From this date to the 26th the condition was becoming worse; delirium of an active character had appeared, and was tolerably constant; the cough continued, but several examinations of the chest up to this time failed to discover anything abnormal; the abdomen was somewhat tympanitic; the temperature had reached  $105^\circ$ . No rose-coloured spots were discovered.

On the 27th, i.e., eight days after the patient was first seen, signs of pneumonia were found at the base of the right lung. From this time the disease ran a rapid course; both lungs were soon involved; there was now very little cough; expectoration was slightly rusty and very scanty; his appearance was very cyanotic.



Death occurred on the evening of the 31st, *i.e.*, fourteen days from the outset of the illness, four days after the discovery of the pneumonia. The diagnosis was enteric fever, complicated by pneumonia.

For special reasons a *post mortem* examination was obtained. No intestinal lesion was discovered; the spleen was of normal size; both lungs were extensively hepatized; there were no signs of pleurisy.

Pneumonia was obviously the cause of death.

The same day that I first visited W. H. P. I was requested to see his sister, Mrs. D., *æt.* 36, who lived in the adjoining house. I learnt that she had been ill since the 18th, that was just about the time of the onset of her brother's illness. She had severe headache, pains in the limbs, some cough, and was very prostrate; these symptoms, together with some distension of the abdomen and relaxed bowels, led to the suspicion of typhoid. On the 25th inst., *i.e.*, seven days after the commencement of the illness, pneumonia, which previous examinations had failed to discover, was detected at the base of the right lung; some characteristic sputa were noticed on this date.

The patient, who was extremely prostrate from the beginning, sank rapidly and died on the evening of the 26th. The temperature an hour before death was 108°.

On July 25th, I was requested to see Miss A. P., *æt.* 25, sister of the previous patients. She lived in the same house with Mrs. D. She had been unwell for a day or two, complaining chiefly of dizziness, moderate headache, and muscular pains.

These symptoms, with a somewhat characteristic temperature, led to the diagnosis of typhoid. On the 30th, *i.e.*, five days after I first saw the patient, seven or eight days from the commencement of the illness, I noticed that the breathing was abnormal; there was no cough, nor had there been any from the first. I found some dulness, with bronchial breathing below the left scapula. 31st, dulness and moist sounds were noticed in both lungs. The abdomen was tympanitic; no spots were discovered.

The disease in this case ran a much less rapid course than in the other patients; there was scarcely any cough all the way through; expectoration was almost absent.

During the last few days of her illness there was active delirium. She died on the afternoon of the 7th inst.

The chief points of interest in these cases, apart from their unusual character, seem to be: 1st. The actual nature of the disease; 2nd. Its causation.

The original diagnosis of typhoid was concurred in both by Dr. Brummitt (who saw the cases on two or three occasions) and Dr. Way, who saw two of them at a later period.

This diagnosis was disproved by the autopsy, and the series, considered as a whole, require other interpretation.

Pneumonia in the ordinary form must be left out of consideration, as must also what is known as epidemic pneumonia, which is simply an unusual prevalence of the croupous variety.

Dr. Way, also Dr. Whittell, who kindly wrote to me on the subject, classified these cases under the head of infectious pneumonia.

If a name must be given, I suppose we cannot get beyond that; but so far as I have been able to find records of this disease, the accounts differ from my cases in one important respect, *viz.*, that the diagnosis was easily made within a day or two of the onset of the illness; in fact, the pneumonia was primary in character—in my patients it was undoubtedly secondary.

Viewing the cases from beginning to end, I cannot but think that they were the outcome of some very unusual morbid agency, the lung being specially selected for attack in the later stages of the disease.

As to the actual causation, I can advance no opinion. I may mention that at the time when these cases, which naturally caused a good deal of excitement, were going on, a rumour was circulated that cattle suffering from pleuro-pneumonia were in the hands of the local butchers. The inference was that diseased meat was being vended. The evidence as to the purchase of diseased animals was conclusive, but the sale of the meat could not, of course, be proved. I make this statement for what it may be worth. In the opinion of others better qualified to speak than myself, there was nothing like cause and effect. The flesh of animals suffering from pleuro-pneumonia is probably used for food much more extensively than we are aware of, with what results we do not know. Veterinary pathologists do not condemn the meat in the early stages of the disease, but in the more advanced stages they state that the muscular tissues are affected and quite unfit for use.

Does cooking in all cases do away with the risk of using diseased food of any kind?

A temperature of 212° F. (boiling point), is said to be fatal to most micro-organisms, but the spores of *Bacillus Anthrax* are not killed in less than three hours by a temperature of 284° F. It is open to question whether the process of cooking is so universal a safeguard as it is supposed to be.

Of the treatment of these cases I have said nothing. It was conducted on ordinary principles. In such instances we are made painfully aware of the limited aid we are able to afford in some acute diseases. They should stimulate us to try and perfect our therapeutic resources.

DR. HAYWARD had met with such cases in his practice, and referred to the difficulty of diagnosing them at times from enteric fever with pulmonary complications.

DR. A.A. HAMILTON then read

### OBSERVATIONS ON PUERPERAL TEMPERATURES.

BY A. A. HAMILTON, M.B., ET CH. B., DUB.,  
HON. ASST. PHYS. ADELAIDE HOSPITAL.

FOR some time past I have been in the habit of taking the temperature of my lying-in patients at each visit, and I wish to lay before you this evening an analysis of these observations. A record of the temperature during the puerperal period appears to me the most convenient method of estimating the percentage of cases in which complications arise. We may obtain, too, in this way useful information as to the effect that the different obstetric operations have on convalescence. Wunderlich, it is true, remarks, in his work on Medical Thermometry, "A normal temperature in the lying-in woman by no means ensures an undisturbed recovery;" but I fancy that no complications of any moment can occur without a rise in temperature taking place. This, at least, is my experience.

My observations do not pretend for a moment to be a complete daily record of each patient's temperature, such as might be obtained in a lying-in hospital. They have simply been taken during the routine visits of private practice, and, as a rule, on the first, second, fourth, and sixth day after delivery. The thermometer has in all cases been placed in the axilla. This gives sufficiently accurate results for ordinary purposes. Some writers have recommended that temperatures in lying-in women should be taken in the vagina; but many objections to this proceeding present themselves. The cases are not selected in any way, being a continuous series, except for a very few, whom I did not see again after their confinement, and one case which I have omitted. In this case the elevation of temperature was not the result of the confinement, inasmuch as the mother had reached the tenth day of an attack of typhoid fever when the baby was born. We are told by the older writers on midwifery to expect a rise of temperature on the third day after delivery, coincident with and caused by the filling of the breasts with milk. More recently it has been questioned whether any elevation of tem-

perature is a normal accompaniment of the establishment of lactation. Some authors—*e.g.*, Drs. Winckel, d'Espine, and Grünevoldt—deny that the flow of milk to the breasts ever causes a rise of temperature.

When pyrexia does occur they attribute it in every case to septic absorption. The majority of English writers, however, recognise painful distension of the breasts as one of several conditions, such as constipation, gastric derangement, mental emotions, &c., which may raise the temperature of a lying-in woman above normal.

In such cases we generally note an absence of rigors, and freedom from grave constitutional symptoms, and the temperature rapidly falls without any special treatment, or with that of the simplest sort. The latter view, I think, appeals to common sense and to ordinary experience. Dr. Macan, of Dublin, states that out of 226 cases in which the temperature rose to or over 100° F. no cause other than distended breasts could be found in 32, or 14.15 per cent.

It is stated that a slight rise of temperature is found, as a rule, immediately after labour, subsiding to normal within 12 or 24 hours. This is spoken of by Wunderlich as a species of mild traumatic fever. In all my cases the first observation was taken within 24 hours, and frequently within 12, and in the vast majority the temperature was then normal, or often sub-normal. With regard to sub-normal temperatures during the puerperal state, I can give no figures, as in all cases where there was no elevation above 98.4° the temperature was entered as normal. In the following statistics I have taken 100° F. as the standard, any rise above which is recorded as pathological, in accordance with that adopted by Dr. Braxton Hicks.

He gives in the Guy's Hospital reports a series of 29 cases in which the temperatures were noted. Among cases where delivery was accomplished by natural efforts a rise above 100° F. took place in 12 per cent., while in the four forceps cases of the series all four, or 100 per cent., rose above 100° F. These cases were attended apparently by students in connection with Guy's lying-in charity.

I have divided my cases into two series, in one of which no antiseptic precautions were taken during labour, while in the other perfect asepsis was aimed at.

That is, in the latter cases an antiseptic lotion was mixed on entering the house, and the hands and wrists carefully rinsed in it after thorough washing with soap and water. This rinsing of the hands in the lotion was repeated before each fresh examination. All instruments were well washed with soap and water, and then dipped in the antiseptic lotion. The external genitals were

washed with the antiseptic lotion after delivery. The antiseptics used have been perchloride of mercury and salufer, or silico-fluoride of sodium. The latter, which has been very highly spoken of by Dr. Mayo Robson, of Leeds, has the advantage of being non-poisonous and very portable, in the form of compressed cubes containing 40 grains each. One cube dissolved in a quart of water makes an antiseptic lotion of suitable strength. A comparison of the cases in which these two antiseptics were used is slightly in favour of the salufer. The difference is, however, only 0.68 per cent., and we can hardly, I think, draw any fair conclusion from this as to the superiority of either drug. The preparation I am using at present is a solution of perchloride of mercury in glycerine, containing 10 grains to each drachm, and acidulated with strong hydrochloric acid. One drachm mixed with a pint of water gives about 1 in 1000. In addition, I now always use an antiseptic lubricant, and boil the blades of my forceps before use. Referring to the use of antiseptics in midwifery, Dr. Martin writes as follows in Hirst's "System of Obstetrics," by American authors:—"Those who diligently and intelligently practise antiseptics during the puerperal state do not expect any febrile movement, and are surprised at any elevation above the so-called physiological limit, 100.5° F."

In the last number of the *International Journal of Medical Sciences* some interesting statements bearing on this subject are quoted from the *Archiv für Gynäkologie*. Drs. Temesvary and Bäcker state there that the temperature of the normal puerperal period does not differ from that of the healthy body under other circumstances.

The following statistics are given as to the results obtained under different kinds of antiseptic treatment. Dr. Döderlein expresses a strong opinion that the entire genital tract should be disinfected in every case. As the result of his experiments, he recommends for the accomplishment of this object, without injury to the mucous membrane, the use of mollen (an excessively fatty soap) and creolin. Carrying out these suggestions, Dr. Günther, in a series of cases, injected, before labour, a quart of an emulsion of mollen and creolin (3 per cent.). The labia were held together, and the injection retained as long as possible.

His cases show only 70 per cent. of normal puerperal periods, a result which, to my mind, condemns the whole procedure.

Dr. Mermann, who does not hold that any necessity exists for prophylactic vaginal douches, gives particulars of 200 labours conducted in the Mannheim Maternity. The patients were carefully disinfected externally, and scrupulous antiseptics

of building, nurses, students, and attendants was observed. In the first hundred cases 21 per cent. had a rise in temperature; in the second hundred, 6 per cent. The difference is said to have arisen from an improvement in the discipline of attendants regarding personal antiseptic precautions.

Dr. Poten, of Hanover, concludes that external disinfection, with a single vaginal douche before labour, gives the best results. Under this method 21.2 per cent. had a rise of temperature.

Dr. E. S. Tait, in a communication to the Obstetrical Society of London, notes that in some cases he has found a rise of temperature due to emotional disturbance. He also states that the use of forceps and perineal tears raise the percentage of high temperatures among primiparæ, but have not the same effect in multiparæ. This is not quite in accordance with my experience, especially with reference to tears of the perineum.

	Number of Cases.	Number in which a rise above 100° F. occurred.	Percent'ge.
Total number ...	470	30	6.38
Without antiseptics ...	316	23	7.27
With antiseptics ...	154	7	4.54
(a) Hydrarg. perchlor. ...	105	5	4.76
(b) Salufer ...	49	2	4.08
Multiparæ ...	359	19	5.29
Without antiseptics ...	245	16	6.53
With antiseptics ...	114	3	2.60
By natural efforts ...	302	14	4.63
By forceps ...	49	3	6.12
By craniotomy ...	2	2	100
By version ...	6	0	0
Primiparæ ...	111	11	9.90
Without antiseptics ...	71	7	9.85
With antiseptics ...	40	4	10.00
By natural efforts ...	66	4	6.06
By forceps ...	45	7	15.55
Born by natural efforts ...	368	18	4.89
Born before arrival ...	79	4	5.06
Forceps cases ...	94	10	10.63
Without antiseptics ...	59	7	11.86
With antiseptics ...	35	3	8.57
Perineal tears ...	20	6	30
Without antiseptics ...	7	4	57.14
With antiseptics ...	13	2	15.38
Among multiparæ ...	4	2	50
Among primiparæ ...	16	4	25
Abnormal presentations, i.e., all positions other than the first and second cranial ...	54	5	9.25
Without antiseptics ...	34	4	11.76
With antiseptics ...	20	1	5

The above figures compare favourably with those of Dr. Mermann at Manheim, where in 200 cases a rise in temperature took place in 18.5 per cent.; and with those of Poten, at Hanover, who found a rise of temperature in 21.2 per cent. in both instances under antiseptic treatment. In my cases the entire number, including those where no special antiseptic precautions were taken, give an average of 6.38 per cent. above normal; and with antiseptics—4.54 per cent.

In each class but one we notice a steady diminution under the influence of antiseptics, amounting in mixed cases to 2.73 out of 7.27 per cent., and in multiparæ to 3.98, or more than half the entire percentage. Contrary to Dr. E. S. Tait's observations, I find that the use of the forceps in multiparæ raises the percentage of high temperature by 1.49 per cent.

In the only two craniotomies of the series no special antiseptic precautions were taken. In both the temperature rose. In one it had fallen below 100° F. by the seventh day, and in the other by the third day, only having reached in the latter case a maximum of 100.4° F.

None of the cases delivered by version rose above normal.

Among the primiparæ we find the exception to which I alluded above. We find here that among 71 cases treated without antiseptic precautions 9.85 per cent. rose above normal, while with antiseptics the result is 10 per cent. in 40 cases.

The explanation of this apparent anomaly is, I think, that in the latter series there were two cases where a slight elevation of temperature, only lasting one day and disappearing without treatment, occurred; in one, after a violent quarrel with her husband and nurse, and in the other after a sleepless night.

Among the cases treated without antiseptics there is not one which can be referred with confidence to such causes. Leaving out, then, those two cases we get 5 per cent. with antiseptics against 9.85 without, which is a fairly satisfactory result. The percentage of high temperatures among forceps cases in the primiparous class is high, viz., 15.55. We shall consider the cause of this presently.

The cases which were delivered before my arrival, show a very small fraction more high temperatures than those delivered by natural efforts after examination. Forceps cases all round give an average of high temperatures in 10.63 per cent., or more than double that of the cases where unassisted nature proved equal to the task.

Abnormal presentations—i.e., all positions other than the first and second cranial—give a marked increase in the percentage of high tem-

peratures, but here antiseptics have effected a diminution of more than half.

This series comprises—

Occipito-posterior	...	...	42
Breech	...	...	5
Footling	...	...	4
Funis	...	...	1
Hand and arm	...	...	1
Face	...	...	1

We now come to a series of cases which I think demands especial attention, viz., those in which the perineum is torn. I was not at all prepared for the large percentage of cases in which even slight rupture of the perineum is followed by a rise in the temperature. There are 20 cases in all, of which 30 per cent. rose above 100° F.

Here we find that the use of antiseptics exercises a most salutary effect. Without them the percentage reaches 57.14, while under their influence it is reduced to 15.38.

The very few cases occurring among multiparæ give two out of four, or 50 per cent., while among primiparæ we find 25 per cent. above normal. Tears of the perineum seem to me to be a most important factor in causing an increased percentage of high temperatures, especially amongst primiparæ, and most of all among those delivered with forceps.

Deducting from the primiparous forceps cases those in which elevation of temperature was accompanied by rupture of the perineum, we have a percentage of 7.31 above normal, instead of 15.55. From this point of view the immediate treatment of rupture of the perineum assumes a position of much importance.

Tears, which would not interfere in the least with the functions of the perineum, or give rise to any after discomfort, may be sources of serious danger as openings for septic absorption. Situated at the very orifice of the genital tract, and constantly bathed in secretions, they offer a most suitable breeding-ground for germs. It has been my practice to insert sutures in every case where a tear of even about a quarter of an inch takes place. The material I always use is horsehair, which I find much more suitable than either silk or wire. Since using antiseptics freely at the time of the labour I have rarely failed to secure good primary union.

I do not allow the vaginal douche to be used as a routine unless some special indication, such as foetor of the lochia, arises. The vaginal douche in normal cases may be advantageous where the services of a skilled nurse, trained in the minutiae of thorough antisepticism can be procured, otherwise I think the patient is safer without it.

I find that in 455 cases the average length of labour was 9.1 hours. In those where the temperature subsequently rose above normal the average was 10.71 hours. The extra one and a half hours, however, cannot be regarded as in any way the cause of the high temperature, as, after eliminating the least serious cases, where the rise was but transient, and unaccompanied by any constitutional symptoms, I find that the remainder only average 9.19 hours. The chief lessons we may learn from these statistics appear to be as follows:—

- (1.) That in a certain number of cases we shall always have a rise of temperature from causes quite beyond our control.
- (2.) That this number may be reduced to the lowest possible limits by strict attention to antiseptic precautions.
- (3.) That instrumental interference causes a marked increase in the percentage of high temperatures, and that therefore, in cases where such interference is necessary, we should redouble our precautions against septic influences.
- (4.) That in every case the perineum should be the object of our most careful solicitude. That we should guard it in every way against injury, and, when even an apparently trivial tear takes place, that we should at once hasten to repair the damage.

DR. MITCHELL had very little experience of antiseptics in obstetrics. He had habitually taken temperatures in his cases for some five or six years, but did not attach much importance to slight rises, as he found them seldom associated with serious symptoms. He had treated 1,000 cases without meeting an instance of puerperal fever. He had at times used antipyretics in high temperatures, and found them always satisfactory. Locally, he sometimes resorted to eucalyptus oil pessaries.

DR. VERCO complimented Dr. Hamilton on his carefully-elaborated paper. He didn't believe in routine douching of the vagina. He had not used antiseptics so largely as Dr. Hamilton, nor did he think that the obstetrician with clean hands and clean instruments needed them much. He referred to the dangers inherent to the adoption of partial antiseptic measures, and pointed out the necessity of most carefully guarding parturient women from the meddlesome interference of imperfectly trained nurses ignorant of the rationale of antiseptic methods.

DR. GARDNER thanked and congratulated Dr. Hamilton for his valuable paper. As to the forceps cases he doubted whether the high temperatures, recorded as following their use, were caused by the instrumental aid; he thought rather that high temperatures were frequently found in such cases because of their inherent gravity.

DR. CLINDENING had listened to the paper with great pleasure, and referred with approbation to the steps being initiated for the better treatment of destitute

women in Adelaide. Previously abandoned to the care of ignorant midwives, they would, in future, have proper treatment under the ægis of the maternity department of the Adelaide Hospital. He then contrasted modern with older obstetric methods.

DR. JAY discussed the advisability of using sutures as a matter of routine in perineal rupture. He had previously used them in all cases, even trivial ones; now he didn't, but in the more serious cases preferred deep kangaroo-tendon sutures to the advocated lateral incisions to prevent perineal laceration.

DR. HAMILTON, in replying, thought Dr. Mitchell's success was to be envied; it was remarkable. He would, however, rather continue to use antiseptic precautions as a preventive of pyrexia than have to resort to antipyretics on account of neglecting such aids. He quite agreed with Dr. Gardner about forceps cases. The results secured by suture of the lacerated perineum depended much on the depth of the sutures. He had never been obliged to use lateral incision to prevent rupture of the perineum.

DR. VERCO read

#### NOTES OF A CASE OF HYDROCELE WITH MILK-LIKE CONTENTS.

By JOSEPH C. VERCO, M.D., LOND., &C.,  
PHYSICIAN TO THE ADELAIDE HOSPITAL,  
AND JOINT LECTURER ON MEDICINE IN  
THE UNIVERSITY OF ADELAIDE.

At the meeting of the association held in October, 1888, Dr. Stirling read a short paper on this case; and the report of it appeared in the *AUSTRALASIAN MEDICAL GAZETTE* for November, 1888. I propose in this communication to complete the history of the patient.

After the primary tapping, when milk-like fluid was evacuated from the tunica vaginalis, he was placed under my care. He had both tunicae distended with puriform fluid.

Examination of the chest revealed impaired percussion resonance at the left anterior apex, and on the right side below the fourth rib in the nipple line, through the lateral region and below the middle of the scapula. Respiratory murmur weak over the area of impaired percussion resonance, and absent at the right posterior base. Vocal resonance diminished over the same parts.

Aspiration in the tenth intercostal space in the right back gave a few drops of pus, and a second exploration, some sanious fluid.

The temperature, during the month he was under observation, ranged at night from 101° F. to 102.6°, and in the morning about 100°.

It was pyrexial, when he was transferred to the surgical ward for incision of his tunicae vaginales.

Three weeks afterwards, he returned to my wards with a temperature of 101°, which gradually rose for a week to 105°, and then somewhat rapidly declined during the next week to the normal; at which it remained during the following fortnight, and at the end of this time he was discharged.

Besides the pleuro-pneumonic disease on the right side, he had developed dulness at the left base—with pain. The physical signs gradually improved, but they had not cleared up when he was sent out on June 11.

On September 30 he returned. He had been weakly for some time, and for a week had been complaining of headache above the left eye. On the 29th he had an eclamptic fit.

Has some paralysis of the right side of the face, tongue is protruded towards the right. Cannot move the left eye outwards beyond the middle line. Has diplopia, when objects are to the left of the median line.

Considerable loss of power in the right arm and leg, though no movements are abolished. Superficial reflexes absent on the right. Patellar reflex present. Sensation is impaired, but not absent on the right side, so far as can be ascertained; but the boy does not understand very well what is said to him.

Up till the time of his death, which occurred on November 28, he was somewhat drowsy, vomited frequently, complained of his headache, had no alteration in his paralyses. His optic discs were rosy, but the vessels were normal, and the edges distinct. He developed the signs of rapid and extensive phthisis.

The autopsy revealed tuberculosis of both lungs, miliary tubercles, larger masses and cavities; and enlarged caseous glands in the mediastinum. The abdominal glands were enlarged, the mesentery being fully half an inch thick, and almost board-like from packed mesenteric glands. A roll of glands extended in front of, and on each side of the abdominal aorta; and completely surrounded the vena cava throughout its extent. The kidneys contained each a yellowish white mass, as large as a pea in its cortex.

No cerebral meningitis existed, but on the orbital surface of the right frontal lobe, attached to the pia mater, and merely pressing into the brain, was a tuberculous mass as large as a French bean. In the substance of the internal convolution on the orbital surface of the left frontal lobe was a second mass. The left corpus striatum was softened, and occupied by a tumor as large as a filbert. In the centre of the left occipital lobe were two masses the size of peas lying together. In the left side of the pons, projecting into the floor of the fourth ventricle was an oval mass, rather larger than a pea. And in the right lobe of the cerebellum were two tumors, one at the back close to the median fissure, and the other at the outer side near the front.

This case was evidently one of general tuberculosis with chiefly large deposits. It is a good instance of tuberculous tumors of the brain; in-

dicating their existence in early life (the boy was nine years of age), their association with tuberculous manifestations elsewhere, *e.g.*, the lungs, and their frequent multiplicity (this patient had eight).

This last circumstance often makes localization difficult, during life: though in this particular instance we could get as far as diagnosing a lesion in the pons, from the associated palsy of the left sixth nerve with the right seventh. The paresis of the right side was doubtless due to the affection of the adjacent internal capsule by the softening of the left corpus striatum from the large mass in its interior. It is interesting to note the entire absence of optic neuritis, notwithstanding the existence of eight separate deposits, in such situations, and of such size, that anyone of them might (one would have supposed) have been an efficient cause of it.

The point of the case, however, which we would emphasize is, that the milk-like hydrocele was associated with tubercle, and was probably itself tubercular.

There is not the slightest doubt that it occurred in a tuberculous subject. There is very little doubt that it was a tuberculous manifestation: the fluid being milk-like, because the hydrocele was a tuberculous hydrocele.

This is almost certainly the case, for the primary tapping was on March 24, and when first seen by me on March 30, only six days later there were signs of lung disease at the left apex, and in the right lower lobe.

We are forced to one of two conclusions; either, *first*, the boy began to develop tubercle, and the manifestations were simultaneously, milk-like hydrocele, and pleuro-pneumonic symptoms; or, *second*, there arose a milk-like hydrocele, which was not tuberculous; it was tapped; the character of the fluid was changed by some inflammation of the tunica vaginalis into pus, and within six days (one knows not in how much less, for no complete examination of him was made in the interval) there had originated marked signs of pleuro-pulmonary disease in both lungs, which gradually drifted into a tubercular disease.

Of these alternatives, the former seems the more reasonable and easier to accept, and therefore we conclude, *the milk-like hydrocele was a tuberculous symptom*: whatever may have been its character histologically, it was clinically tuberculous in its nature.

DR. VERO then showed specimens from the brain.

DR. DAVIS THOMAS said it would have been valuable to have had the milk-like contents strained and examined for bacilli.

DR. GARDNER had found two such cases recorded one by Sir W. Ferguson; the other by Vidal; the former an adult (42) recovered.

QUEENSLAND MEDICAL SOCIETY.

GENERAL MEETING, held July 15, at School of Arts, Brisbane, at 8.30 p.m. Present: Drs. Thomson, Smith, Gibson, Hill, Connolly, Shout, W. S. Byrne, Forbes, and Love.

DR. CONNOLLY showed the skull of an infant which was minus the upper parts of the brain—only the basal ganglia being present. The infant had lived nearly three weeks.

A letter of thanks was read from Dr. O'Doherty, of Croydon, thanking the Society for the honour done him in electing him an honorary member.

Dr. FORBES read Dr. Hare's paper on the effect of cold bath treatment on the mortality in typhoid. Some discussion followed, and it was agreed to postpone the discussion till the following meeting.

R. J. QUINNELL, M.D., Aberdeen, Surgeon-Major, of Brunswick street, was elected a member.

THE MONTHLY MEETING for August was held on 13th inst., at 8.30 p.m. in the School of Arts, Brisbane. Present: Drs. Thomson, Tilston, Little, Quinnell, Connolly, Gibson, Turner, Hare, Mullin, Hill, Kelleher, W. S. Byrne, and Love.

The minutes of last meeting were read and confirmed.

The following gentlemen were elected members of the Society: Thomas Lane Bancroft, M.B., Edin.; William Kelleher, M.B., R.U.I.; Alfred Jefferis Turner, M.D., London.

On the motion of the PRESIDENT it was resolved to forward a letter of condolence with him in his bereavement, to Dr. Clowes, of Albion.

The PRESIDENT called the attention of members to some remarks in the retiring address of the late President of the Royal Society of Queensland, disparaging to the local members of the medical profession. After some discussion the Secretary was instructed to write to the present President of the Royal Society correcting the misstatements in the address referred to, and expressing the surprise of the Medical Society at the gratuitous attack made upon them.

The Committee appointed to revise the rules presented their report, and a special meeting was convened for a future date to consider the amendment proposed.

It was resolved to hold the annual dinner at an earlier date than usual, owing to the presence of Sir William Macgregor, M.D., in town, as the Society wished to entertain him on that occasion. Drs. Thomson, W. S. Byrne and Love were appointed a dinner-committee to arrange details.

A discussion then followed upon Dr. Hare's paper on the effect of the cold bath treatment on the mortality in typhoid.

The SECRETARY, in introducing the discussion, pointed out that Dr. Hare wished to learn from the experience of members, whether they coincided in his views, that the decrease in the mortality of typhoid cases during the past two-and-a-half years had been directly due to the influence of the cold bathing treatment, or whether they recognized an alternative?

(1). That the type of the disease in Brisbane—which so far as can be judged by the mortality—had for five years been similar to that in the other colonies and in the old country, suddenly underwent a change at the height of the fever season, in January, 1887, when the cold bath was first employed.

(2). That the change was limited to Brisbane.

(3). That the milder form of fever has since persisted.

(4). That the alteration in type was of so selective a nature, that while it greatly lowered the mortality from pyrexial causes, it left the dangers arising from the intestinal lesion practically unaffected.

DR. THOMSON thought that the type had changed during the last few years, as he did not see the severe cases in his practice now that he did when in residence at the Brisbane Hospital, some years ago. He believed firmly in the good effects of cold bathing; but he was also of opinion that part of the reduction of the mortality was due to the mitigated severity of the disease as met with during the last three years.

DR. LITTLE thought that Dr. Hare had proved his case. He did not think that change of type could account for the great reduction of mortality. Personally, the cold bath had taken the terrors of typhoid from him; formerly he used to trust to rest, diet, and expectant treatment, but now he used the cold bath whenever possible. He thought that the reason he did not meet the bad cases now that he used to, was because he used the cold baths, and he had no doubt that many of his former cases might have been saved if he had had the bath to rely upon then. He was accustomed to have the bath placed by the bedside and filled by a hose from the nearest tap, and to empty it he used the hose as a syphon; he now used no other treatment. He was most pleased with the evident desire to get at the truth in Dr. Hare's paper, and congratulated him warmly on his success.

DR. TILSTON did not think we should treat typhoid so lightly as Dr. Little thought, as perforation and hæmorrhage still accounted for considerably over half the mortality, and these did not appear to be affected by the bath. Six years ago the fever wards used to be a pandemonium, but now it was rare to get acute delirium under the bath treatment.

DR. BYRNE thought that there had been a change in the type during the last few years. In his practice he had not found perforation and hæmorrhage nearly so frequent as the hospital statistics for either period shewed. He thought that although clinically the cold bath was very successful, yet it would tend to drive the blood into the abdominal viscera, and by increasing the existing congestion so favour hæmorrhage.

DR. GIBSON thanked Dr. Hare for his paper, and congratulated him on his good results. He used the bath treatment wherever he could. He thought that perhaps cases of late had appeared less severe, because of that treatment. The popular prejudice against the hospital had been much diminished since the advent of this treatment. Whenever he was unable to use the bath in private practice, he strongly urged the patient to go into the hospital that he might have the benefit of it. He had noticed in some severe and long continued cases with relapses, in children especially, that they recovered under the bath régime, and got fatter and stronger than before.

DR. HILL said there were many objections to the general use of the cold bath, especially in adults. He used ice-caps over the head and abdomen. His last three cases had hæmorrhage, but all recovered. In these the bath had not been used.

DR. HARE, in reply, said he did not think the type lighter of late, for the mortality from ulcerative lesions was much about the same before the bath period as now. And he thought this an argument in favour of the type being as severe now as before. Experiments made on rabbits immersed in iced water, had shewn that anæmia, not congestion, of the bowel was caused.

A hearty vote of thanks was accorded to Dr. Hare for his paper.

### NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE 83rd General Meeting of the Branch was held in the Royal Society's Room, Sydney, on Friday, 2nd August, 1889. Present:—Dr. Fiaschi, President, in the chair; Drs. Wilkinson, Cohen, Watson, G. A. Marshall, Reddall, Martin, Brady, Breneman, O'Reilly, Hankins, Shewen, Manning, Rennie, Hodgson, Wm. Chisholm, West, Worrall, Quaife, Foreman, Crago, Thring, and Clubbe.

The minutes of the previous meeting were read and confirmed.

DR. WILKINSON read some notes on a "case of Heart disease," and exhibited some specimens.

DR. HANKINS asked if there was any history of Syphilis or rheumatism.

DR. WILKINSON replied that no history of the man could be obtained, as although the man was not unconscious, still he could only answer simple questions.

DR. WORRALL exhibited an apparatus, devised by himself, for washing out the abdominal cavity. It consisted of a glass funnel and a glass tube 9 inches long, united by a piece of rubber tubing—materials easily rendered aseptic. Its other advantages were that it was less cumbersome and more readily brought into use than Tait's trocar used as a syphon. It conveyed the cleansing fluid to the bottom of the pelvis, and thus the blood and debris were floated up and forced out by the positive intra-abdominal pressure. A stream of hot water could be directed upon any point desired. In all these particulars the use of this apparatus was a vastly superior way of washing out the abdominal cavity to that recommended in the text books of pouring in hot water from a jug.

The utility of the apparatus was discussed by Drs. Hodgson, Fiaschi, Hankins, Wm. Chisholm, Quaife, Foreman, and W. J. O'Reilly.

DR. FIASCHI read a paper on "Skin-grafting and its recent advances," which will be found on page 315.

DR. HANKINS said that Dr. Wolfe's plan of treatment was particularly in connection with the eyelids. He (Dr. Hankins) would have liked Dr. Fiaschi to have quoted some cases with regard to skin-grafting on the extremities. He (Dr. Hankins) had had a case in the Prince Alfred Hospital in which the head of the tibia had been removed by Dr. Goode. The man was discharged, but returned to the hospital after a short time. There was then found a sinus. In order to get this healed he (Dr. Hankins) had taken two skin grafts from the calf of the leg, but thought they would slough. They, however, became attached; but the raw surfaces on the calf were a long time healing.

DR. RENNIE read a paper on a "case of Diphtheritic Paralysis (?)."

DR. CRAGO said he could quite bear out the remarks of Dr. Rennie with regard to paralysis of the intercostal. Dr. Carpenter says that, if sulphur is used in the treatment of diphtheria, there is little or no chance of diphtheritic paralysis.

DR. CLUBBE moved,—"That in the opinion of this Branch of the British Medical Association, when dealing with Friendly Societies, its members should use the agreement that was drawn up by a sub-committee appointed by the Branch some time ago,"—and said he (Dr. Clubbe) had attended a number of meetings at which this agreement had been discussed, and it only now required to be accepted by the Branch, and put forward as coming from the Branch.

DR. HODGSON seconded the resolution, and in doing so said there should, no doubt, be an agreement between the Medical profession and the Friendly Societies. The

Lodges have, at the present time, a decided advantage. The resolution was a good one; but there will be a great deal of difficulty in carrying out the matter.

DR. WILKINSON moved the following amendment,—"That it is advisable to postpone the discussion on Dr. Clubbe's motion until the agreement drawn up by the sub-committee, dealing with the Friendly Societies, has been circulated among the members."

Seconded by Dr. Cohen, and carried.

### A MEDICAL REFERENCE LIBRARY FOR SOUTH AUSTRALIA.

A MEETING of the medical profession was held on the evening of August 22, in the Outpatients' Dispensary, Adelaide Hospital, to consider the question of forming a Medical Reference Library. There was a good attendance, and Dr. Gardner presided. He said the Public Library Committee had given a room for the purposes of a medical Reference Library, and the Adelaide Hospital authorities had consented to allow the collection of medical works there to be added to the Library. The movement was due to the energy and influence of Dr. Stirling, who had originated the idea and to whom thanks were due. The proposal was that the members of the medical profession should subscribe and raise a fund to obtain periodicals, magazines, &c., in French, German, and English. Dr. TODD mentioned the names of several absent medical practitioners in the country who would subscribe. Dr. STIRLING said it was considered by members of the profession that it was high time that there should be in the city a medical library which should represent the leading opinions of English and Continental writers. A private library of such a kind would be out of the reach of any individual member of the profession. The Reference Library it was proposed to have would be augmented by the library at the Adelaide Hospital, which consisted of a collection of six hundred or seven hundred volumes, which had not been added to for some four or five years. The medical staff of the hospital had offered a donation of £100 towards the purchase of works. The question of country members being allowed the use of books was discussed, and it was urged that the books should be kept in the library. On the other hand, it was contended that no difference ought to be made between town and country members; if a book was out it mattered little whether it was in the country or town. There would have to be a restriction as to time. The point to be settled was whether this should be a lending or a reference library. The country members were in favor of a lending library, and this idea Dr. CLINDENING supported. He moved "That it be a lending library." Dr. SINGLETON seconded. It was pointed out that the public under proper restrictions would have access to the books, but the works would not be lent out. The motion was carried. It was decided that the subscription be £22s. per annum, applicable to all members. Drs. Cleland, Corbin, Verco, Thomas, and Stirling were appointed a committee to arrange a scheme, confer with the Public Library Committee, and arrange details, the committee to report within twelve months to a general meeting of the profession. Dr. DAVIES-THOMAS suggested that it would help the library a great deal if the members would give books from their private libraries. This met with favour. Dr. STIRLING said Dr. Moore of Strathalbyn had promised 100 volumes. He believed that it would not be long before they had 7000 volumes; they had about 2000 already. This closed the proceedings.



NOTICE.

*The Editor will feel obliged by any gentleman, who wishes to ventilate any subject of professional or public interest, writing an editorial or leading article on it, which if found on perusal to be consonant with the policy of the paper, will be inserted in an early number.*

*All communications intended for the Editor should be sent to the 'A. M. Gazette' Office, 35 Castle-reagh Street, Sydney.*

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AUSTRALASIAN  
MEDICAL GAZETTE.

SYDNEY, SEPTEMBER 15, 1889.

EDITORIAL.

THE SOUTH AUSTRALIAN MEDICAL  
BOARD AND GEORGE BOLLEN,  
M.D., HAHNEMANN COLLEGE,  
CHICAGO.

THE Supreme Court of South Australia, as will be seen by the accompanying reports, has granted a *mandamus* "commanding the South Australian Medical Board to give to George Bollen, of Port Adelaide, Doctor of Medicine, a certificate of his being a legally-qualified medical practitioner."

The first application of this gentleman was made on 9th June, 1881, and the qualification he offered to the Board for registration was a diploma of Doctor of Medicine of the Hahnemann College of Chicago. It was well known that Mr. Bollen had only been absent from South Australia for some 18 or 14 months, and it was doubted by the then existing Board whether, as required by the Medical Act of South Australia, even in easy-going America, a diploma obtained after nine or ten months' study would be considered sufficient to qualify its holder "to practise medicine in all its branches and to hold Government medical appointments" in that country.

The Medical Act which requires this was passed in 1880, being introduced ostensibly in the interests of German qualified medical men who had passed the Staats Examen, but who, not being graduates in medicine of a university, were unqualified in the terms of the then existing Act which had been passed so far back as 1844.

Advantage was taken of the proposal of the Government to legislate in this direction, and an approved bill was drawn up with great care on the

lines of the British and Victorian Acts. This bill was mangled as usual in its progress through Parliament, and all the provisions intended to safeguard the public against the false pretences of irregular practitioners were expunged from it. As a matter of rumour it was stated that it was submitted *sub rosa* to Dr. Bollen, who approved of it as being sufficiently elastic to suit his purposes, but, as a matter of fact, it was *not* submitted to the medical profession, to the Medical Board, to the Colonial Surgeon, nor to any body or person qualified to express an opinion as to its effect as amended, prior to its becoming law.

When Dr. Bollen's application for registration was made in the following year, as he could give no satisfactory proof that his qualification was one that entitled him to be registered in compliance with the new Act, its consideration was postponed in order that further information might be obtained from the United States Government through the Secretary of State for the Colonies.

In August, 1882, some testimonials were presented by Dr. Bollen, shewing that the diploma of the Hahnemann College of Chicago is a legal qualification to practise medicine in the State of Illinois. But they also shewed that the law of that State requires the certificate of the Board of Health of the State to make it a valid instrument. This certificate Dr. Bollen did not produce, and, therefore, the further consideration of the case was again adjourned, the Board feeling that every precaution should be taken against registering a qualification that did not meet the requirements of the Act, on the ground that no power was given by it to the Board to remove any person improperly or erroneously included in the register of legally-qualified medical practitioners. They further submitted their difficulty to the law officers of the Crown, and the Crown Solicitor advised them as follows in December, 1882:—

"In the construction of the Act, 'foreign State' as applied to America means, I think, the Federal Government and *not* individual States. Unless, therefore, the diploma is one which would be recognized all through the union, it does not come within par. 12 of the schedule. The onus of proof in all cases lies with the applicant."

It was not until July, 1886, that Dr. Bollen again brought the subject before the Medical Board, which again decided to refuse the application, "acting on the opinion of the Crown Solicitor as to the interpretation of par. 12 of the schedule of the Act of 1880."

In June, 1887, application was once more made for registration, when the Board again declined to register the diploma, having been further fortified in its decision by the opinion of the Attorney-General, who wrote:

"I think the Medical Board are acting within the strict letter of the law in refusing to register Dr. Bollen's name on the list of legally-qualified medical practitioners."

In October, 1887, the Medical Board received another application for registration on behalf of Dr. Bollen, accompanied by affidavits from Joseph B. Leake, a lawyer, and T. Hayes Sadler, H.B.M. Consul at Chicago, to the effect that the diploma in question entitled its holder, after registration by the Board of Health of Illinois, to practise medicine in all its branches in that State, and to hold medical appointments under the Government of that State. Also, that on presentation of the diploma to the Board of Health of any other State he would be entitled to similar privileges in that State, and so on throughout the Union. But the affidavit also declares that "the United States Government has enacted laws for the proper examination of such doctors and surgeons as it may commission in the army, navy and marine service, for examination of applications for pension, or to attend upon other persons for whom it is under obligations to provide medical attendance."

The Medical Board argued that these appointments, italicised above, being of a civil character and in direct relation to the Supreme Federal Government of the United States, are those which are contemplated in par. 12 of the schedule of the Act as medical Government appointments in the "foreign State" of America, and nowhere in Dr. Bollen's statements, nor in the affidavits he produces in support of his claim, did it appear that the diploma of the Hahnemann College of Chicago entitled its possessor to hold such appointment under the Supreme Government. They also held that the local Government appointments in the individual States alluded to in the affidavits, are of a municipal character, and not by any means such as should be considered Government appointments according to the interpretation of the schedule by the law officers of the Crown.

The Board, therefore, replied to this application to the effect that the affidavits produced in its support themselves furnish proof to the satisfaction of the Board that the diploma does not comply with the requirements of the Act.

Subsequently a further affidavit by a Dr. Ludlam, an official of the Hahnemann College was put in which, in the opinion of the Board, only referred to local State appointments and did not at all alter the position of affairs, but in that of the law officers of the Crown it furnished sufficient evidence that the diploma in question complied with the requirements of the Act.

On the Supreme Court being then applied to for a *mandamus* to compel the Board to register the qualification, the Crown Law Officers abandoned the Board because it was unable to agree with their construction of the Act, and that body had to appear and defend the action at its own cost.

The result of the argument before the Full Court was that it decided that a State like New York, having its own complete system of government with its own laws, judges, Attorney-General, and so on, is a foreign State within the meaning of the Act, and that the State of Illinois, having a similar status, is also a foreign State, and, therefore, the possessor of a diploma qualifying him to hold appointments under the Government of that State is entitled to be registered as a legally-qualified medical practitioner in this Province, and their *mandamus* issued accordingly.

The Medical Board, upon service of the *mandamus*, met on August 26 and, in obedience to the order of the Supreme Court, they registered the qualification in dispute, then at once resigned, lest they might be forced against their consciences to admit a crowd of holders of similar non-qualifying qualifications to the roll of practitioners of South Australia.

It is much to be regretted that the Supreme Court of South Australia did not take the rational view of the effect of this diploma in the United States, which was put forward by the Medical Board in its patriotic and unselfish attempt to protect the population of South Australia from the evils which must ensue upon the official recognition of diplomas obtained after a short visit to America, and a few months of study. To give a man who has studied for such a short time the same status in the eyes of the uninitiated as another who has laboured diligently for four years, is manifestly unjust to medical men obtaining their qualifications from the British or Australian Universities. In a colony in which, apparently a large proportion of the electors are imbued with protective ideas in regard to native products, this is phenomenally absurd, when viewed in relation to the medical graduates trained at the Adelaide University, who have to work hard for five years to be placed in a similar position to Dr. George Bollen, after a few months trip to Chicago.

The following is the official report, of the case :—

#### REGINA V. THE MEDICAL BOARD.

Mr. J. H. Symon, Q.C., with Mr. Nesbit, for the prosecutor. Mr. Moore appeared with Mr. George Hardy to show cause.

Mr. Symon moved that the rule obtained by him on June 4 for a *mandamus* directed to the South Australian Medical Board requiring them to give George Bollen a certificate as to his being a legally-qualified medical practitioner should be made absolute. In

moving the rule he was afraid he gave the court to understand that the Medical Board were unanimous in refusing the certificate. That was not so, and he desired to state that at least one (Dr. Stirling) dissented from what the majority of the board did, and his protest was recorded.

Mr. Moore, in showing cause, said he took objections to the rule. Firstly, that it ought not to have been granted on the affidavits filed; secondly, that the rule was bad on the face of it; thirdly, that the rule—if made absolute—could not be enforced; and, fourthly, that there were no merits. This was an application for a prerogative right of *mandamus*, and was also on the Crown side of the court, the practice of which was regulated by sections 27 and 28 of Act 8 of 1867. The Medical Board under its Act was bound to perform voluntary and onerous duties, and they had no power of removal if a member were once placed on the register of medical practitioners, therefore it was all the more important that they should resist such applications. He argued that if the board were in doubt of that being the case, the court would rather decide in favour of the board. He contended that the word "State" in the schedule to the Medical Act meant "foreign sovereign State," and not a portion of a State, such as the one in which Dr. Bollen obtained his diploma. There was no evidence that he was entitled to practice all through the States of America, and he contended that the board in the exercise of their authority had exercised it reasonably and *bona fide*, and, that being so, the court would not be likely to interfere. They had no personal objection to Dr. Bollen, but they felt that the diploma was not one which they could admit.

Mr. Symon said it was absurd to suppose that a man could go round to every one of the Federal States and obtain authority to practice in them, and he contended that the fact of his having produced affidavits to show that men holding diplomas similar to that obtained by his client were permitted to practice and hold Government appointments in the State of New York was quite sufficient. The board were not an examining body, and not being men possessed of legal knowledge it was incumbent upon them to accept such evidence as would satisfy any ordinary person.

Mr. Justice Boucaut said this was a somewhat important case, and he was very glad to hear Mr. Moore say that so far as Dr. Bollen was concerned, the South Australian Medical Board did not object to him, but that it was to his diploma that they took exception, because they did not consider it a diploma within the meaning of the Act. He could quite understand that they had been anxious to obtain the best possible evidence on this point, and he might say that sitting as a court they knew nothing about medical schools, and he disclaimed any intention of saying whether this or that was the better school, or whether Dr. Bollen was or was not as well qualified as any of the other medical gentlemen to whom we were so often indebted for advice and treatment in this colony. The question for the court to decide was whether Dr. Bollen had a right to be registered as a legally-qualified medical man by the South Australian Medical Board, and that depended upon the construction of the Medical Act of 1880. They had to determine whether the question of admission to the status of a legally-qualified medical practitioner in South Australia was to be according to law, or whether it was to be at the uncontrolled and arbitrary discretion of the Board; because if it were to be at the latter, the Board might say if they chose, in regard to a Fellow of the Royal College of Physicians, that they were not satisfied with him, and would

not admit him, and consequently no matter how qualified a man he might be, they could say that they were acting according to the statute, and could adhere to their decision. There would be no control over them whatever, and if Mr. Moore's contention were to be followed they might even go to the extent of refusing to register a man simply on the ground that there were sufficient medical men in Adelaide. Of course this was reducing the thing to an absurdity, but it would be a thing that could occur. Now, Mr. Symon said the board had no discretion to examine into the qualifications of individual men, and that their duties were limited to enquiring whether he produced a diploma from one of the schools whose certified members were capable of holding Government medical appointments such as had been stated men possessing the diploma held by Mr. Symon's client were capable of taking. He thought the discretion of the board was limited to that, and to that only. It was clear that what they had jurisdiction over was to enquire whether or not, to their reasonable satisfaction, it was proved that this qualification entitled this gentleman to practice in another state and to hold Government medical appointments, and not to enquire whether it was a proper school of medicine. It was clear that that was the effect of the Act, because this Act must be read in connection with the Medical Act of 1844. According to that Act they were entitled to enquire whether the foreign medical board, issuing the diploma was of sufficient credit and authority to allow of its being accepted here. Now, however, they had not that alternative, but had simply to enquire whether or not the diploma is sufficient, and they were bound to accept it if the evidence satisfied them as reasonable men, and if they would not then the court might be called on to issue a *mandamus* to compel them. A point had been raised in regard to this diploma of Dr. Bollen's as to its allowing him to practice only in the state in which it was issued, and not in any other of the Federal States. But affidavits had been put in to show that the holding of such a diploma permitted of his practising in the State of New York, and holding Government medical appointments there, and if that were permitted in such an important state as New York it would require a great deal of argument to convince him that it was necessary for Dr. Bollen to prove that he was entitled to practice in all the other Federal States. The affidavits stated that he was entitled to practice in the state where his diploma was obtained as well as in other states, and also to hold Government medical appointments, and, so far as he was concerned, within his judgment he was within the schedule of the Act, and was legally qualified to practice in all branches of medicine and to hold Government appointments, and therefore he was entitled to a *mandamus*.

Mr. Justice Bunday concurred with his learned colleague. He briefly alluded to the circumstances which induced the passing of the Medical Act which is in force at the present time, and went on to say that as the law stood now it was necessary that persons coming here should prove to the satisfaction of the board that they possessed qualifications which would entitle them to practice medicine in all its branches, and to hold appointments as Government medical officers in any foreign State. The court had had to enquire as to whether the evidence which was adduced before the board was sufficient to have induced that body to have accepted Dr. Bollen as a person coming under the provisions of the schedule of the Act. Whether the applicant was a homoeopath or an allopath did not appear to be in discussion, but it was satisfactory to know on looking at his affidavit that not only had Dr. Bollen

attended a very important medical school—the Hahnemann Medical College of Chicago—but, in addition to passing his examination, had written an essay which had been referred to in several medical works. As far as he could judge from the arguments and the evidence adduced the applicant had properly obtained his diploma qualifying him for the practice of medicine in all its branches, and that being so he agreed with his learned colleague that the applicant was entitled to have the rule made absolute, and if the result was to show the Medical Board how powerless they were under the present state of the law, they would see that it was a matter for the Legislature and not for the court.

Rule made absolute for the granting of a *mandamus*.

### THE WATER SUPPLY OF ADELAIDE.

A REPORT by the Chief Inspector of the Central Board of Health in South Australia, made on August 9, shows that the area from which water flows into the Hope Valley Reservoir for the water supply of Adelaide and its suburbs is not by any means as free from impurities as it should be. Dr. Poulton, who, since as far back as 1887, has given much attention and time to the question of the purity or otherwise of the Adelaide water supply, says there is a grave probability of the water in the reservoir being rendered impure both by reason of surface drainage and the deeper percolation through the subsoil. The catchment area of the reservoir is traversed by two roads open to general traffic; and contained within it, is alienated land over which it is highly improbable that the Government or the Water Conservation Department have any efficient control. Within this area are five houses, one of which, though only about 100 yards from the water itself, had attached to it outhouses which were in a positively filthy condition. From observations made but recently, he also noticed that there was no apparent outlet for drainage from any of the other houses except towards the water in the reservoir. He is convinced that storm waters had actually swept over the farmyard of the nearest house and its surroundings and thence into the reservoir. A few chains from the reservoir is the habitation of the caretaker, and to this was attached an earth closet. The ultimate certainty of soil pollution caused him to stir in the matter. If the present order of things continues, the subsoil may become so impregnated as to allow percolation of contaminated water into the main store after heavy rains. Also, despite the fact that a quickset hedge is planted round the reservoir enclosure, and is supposed to effectually prevent the approach of animals, an aperture in the fence of the house referred to permits them free egress and ingress. It is possible, that dogs having as is the case, free access to the water, hydatid disease may follow the drinking of it. It is surprising that

here in Australia, where hydatid disease is more prevalent than in any country in the world, except Iceland, and where it is known indubitably to be caused by the access of dogs to drinking water, that the authorities controlling the water supply of a large city should permit them to come near the reservoirs. The drainage from all the habitations near the water gravitates, by reason of the sloping nature of the ground, towards the reservoir. He brought forward the matter of the danger which thus existed on March 21, 1887. In the following April the President of the Central Board of Health sent a communication to the President of the South Australian branch of the British Medical Association, in the course of which he said that the board had compelled the owner of the house near the reservoir to construct a new cesspit and take measures to keep his premises continually clean. The attention of the Hydraulic Engineer was called to the danger that might arise from pollution of the water. This led to an inspection by the then Hydraulic Engineer (Mr. Mestayer), who reported that he was satisfied that no pollution had occurred. He, however, thought it undesirable that a farm should exist so near the reservoir, but nothing could be done, as under the Waterworks Act no power of intervention was given unless contamination of water could be proved. It appears that the Hydraulic Department wanted to purchase the land so as to get it under their control, but there were legal difficulties in the way of completing negotiations. These, it was considered, were now in a fair way of being removed, and the Water Conservation Department hoped in a short time to obtain possession. While the department acknowledged things were not in a satisfactory state so far back as 1887, positively nothing has been done in the interim. In June last Dr. Poulton paid two visits to the reservoir during a time of heavy rain, and assured himself that contamination was going on, and that all water draining from the adjacent badly-kept farmyard manure-heap and pigstye ran into the reservoir. Further, he had no hesitation in saying that with every heavy shower fresh impurities were carried into the main body of water. It is most dangerous to allow the private offices of persons to be situated in the catchment area, as, no matter how careful a supervision is exercised, nothing could prevent ultimate pollution of the water. While deprecating anything approaching a scare in this matter, Dr. Poulton deemed that in the public interest the South Australian Government could not do less than purchase the whole of the land owned by private individuals within the catchment area, and so enclose this space as to effectually prevent any likelihood of

future contamination of the reservoir. A recent analysis of reservoir water made for the Board of Health by Dr. Rennie showed that the fluid contained a quantity of albuminoid ammonia, one of the products of decomposing animal and vegetable matter.

### THE NEW MEDICAL BILL FOR VICTORIA.

WE have received a copy of a bill which it is proposed shall be introduced in the Parliament of Victoria for the purpose of regulating the practice of Medicine and Surgery in that colony, which, however, would be more easily reviewed had it been printed with the usual marginal notes. It is divided into four parts, the first of which deals with the formation and duties of a Medical Council. This council it is proposed shall consist of fifteen members, four of whom are to be appointed by the Governor with the advice of the Executive Council, one by the Senate of the University of Melbourne, and ten by election by the registered medical practitioners of the colony. We would point out that the provision in clause six, that any registered medical practitioner may nominate himself for election by a letter to the President of the Medical Board, is unwise, for under it any new arrival entirely unsuitable, unacquainted with the circumstances of the colony, and with no qualification but his own self-conceit, might be a candidate, and though not at all likely to be elected, would add to the trouble and difficulty of election. No candidate should be allowed to nominate himself, but this should be done in writing by, say, three or five other registered practitioners. This would throw no difficulty in the way of a suitable man and would prevent the election being made a means of notoriety or advertisement by unscrupulous persons. A man who could not get five professional brethren to nominate him would be in no way representative and would under any circumstances have no chance of election. This portion provides fully enough for the election of the first council, but it seems to us to be indefinite as to the election of succeeding ones, and we think the mode of procedure at such future appointments or elections should be more distinctly laid out. It would be a nice state of things to find at the end of five years that an amending act was required for the appointment of the new council.

Part two makes the provisions usually considered necessary as against the assumption of titles by unregistered men, but, so far as we can see, does not prohibit practice by such persons. This we think is wise, for it would be impossible to strictly enforce such a pro-

vision and would create an army of martyrs in the eyes of the unthinking. Clause 31 has a long list of the titles which must not be assumed under a penalty of £50, but we fear that, in many instances, a prosecution would break down under its provisions. For instance, supposing an unregistered man were to call himself "a specialist," or even a "medical specialist," as is often done in New South Wales, would it be met by this clause? We think not. We are of opinion that in addition it is necessary that any person who acts in any way as a medical practitioner should be obliged to place a notification of the fact on the house in which he carries on his practice, and that any person doing so who is not registered by the Medical Council should be compelled to add in a legible manner after his name "Unregistered by the Medical Council." This was a recommendation of the Select Committee of the Legislative Council of New South Wales, and was adopted by that House. The provisions in Clause 33 that no unregistered person shall be appointed as medical officer to any vessel leaving Victoria, or to any institution receiving Government aid, is necessary and just.

We think that some stricter provision is necessary as to the proof of identity of the applicant for registration with the person named in the diploma, and we are of opinion that a certified photograph would be the best means of establishing it.

This part also provides for the removal of names from the register on removal or death, or as the result of infamous conduct.

Parts three and four are the same as in the old act, and it is proposed to re-enact them without change. We would recommend that instead of bringing them anew before Parliament, these parts should be left unrepealed, for every clause adds to the labour and difficulty of passing an act of Parliament, and no unnecessary labor should be voluntarily undertaken.

### THE ORANGE HOSPITAL.

THE reports which appear from time to time in the local press with regard to the management of the Orange (N.S.W.) Hospital disclose a most unsatisfactory condition of affairs, which urgently needs searching enquiry by some competent but impartial authority. Party feeling appears to be too strongly aroused for an unbiassed decision to be given by any one having local connections. We think it high time that, in view of the institution receiving a subsidy from the Government, an investigation should be made by some officer sent from Sydney for the purpose. Some of the incidents being the subject of actions at law, and being still *sub judice*, we refrain for the present from minute criticism as to the merits of the various contentions.

## LETTERS TO THE EDITOR.

THE POSITION OF MEDICAL PRACTITIONERS  
IN GERMANY AND THE TREATMENT OF  
TYPHOID FEVER BY ICE BATHS.

(To the Editor of the A. M. Gazette).

SIR.—In a letter on the Cold Bathing Treatment in typhoid fever, published in the August number of the *A. M. Gazette*, Dr. Thomas P. Lucas, of Brisbane, informs us "that he follows his own judgment and common sense," (by the way not a bad plan this) and that "practitioners who won't dare to do so ought to go to Germany." From this latter sentence I must doubt if the doctor knows much about the position of medical practitioners in the country he recommends.

The course of medical training being not less than five years in Germany, and the medical law being a very strict one, a German practitioner, after he once is duly qualified, is by the public and by his fellow practitioners *ex ipso* considered a competent medical man. Should, therefore, his own judgment and common sense induce him in any case to have recourse to "violent treatment," (as Dr. Lucas correctly styles an icebath), and should his attempts not be crowned with success, he would have to fear infinitely less in Germany from adverse public criticism or from the verdict of an incompetent jury, as it would be his fate in New South Wales for instance, where the public—not being able in many cases to distinguish an unqualified from a qualified practitioner—regards with suspicion almost every medical man, unless he should enjoy a long established personal reputation.

Ice baths in the treatment of typhoid fever I have, except in Dr. Lucas' letter, never before seen mentioned, not even in Dr. Hare's article in the July number of this journal. Were they ever proposed in Germany I feel sure that of all the "big guns" only one (Jürgensen) might possibly favour the idea for an exceptional case, though I do not think that even in his clinic a bath of less than 65° is ever being employed now-a-days, whereas in almost every other hospital they do not go below 70°. Since the introduction of naphthalin, antipyrin, antifebrin, phenacetin, &c., in Germany, the cold bath is usually not so much employed in cases of high and continued fever simple, as it is in great stupor and in severe nervous symptoms.

The sudden chilling in the ice bath (if this term stands for icewater baths of 32°) must undoubtedly be "a severe shock to the nervous system of the typhoid fever patient," but the cool bath of about 75° is not, at least not in all cases. While suffering myself as a medical student from an exceptionally severe attack of typhoid fever, after a period of over four weeks profound nervous prostration, I only remember the joy I felt, whenever, in a state of semi-consciousness I noticed that the cold bath was being rolled alongside my bed.

There is another remark in Dr. Lucas' letter, which makes me suspect that he never stayed long in the country chosen by him for practitioners "who won't dare to follow their own judgment." "Three women died, not from typhoid fever, but from abortion, ending fatally through hæmorrhage or septicæmia, caused by the violence of the ice baths." In my opinion it is not likely that a medical man would live two months amongst his fellow practitioners in Germany, and would yet expect that he will ever meet with a case of "septicæmia, caused by the violence of the ice baths."

Yours truly,

J. COLPE, M.D.

Nymagee, N. S. Wales, August 22nd, 1889.

## QUACKERY IN NEW SOUTH WALES.

To the Editor A. M. Gazette.

DEAR SIR—I enclose an advertisement from the leading Grafton paper, which is a specimen of the travelling quacks by whom we are occasionally visited here. I should be glad if any medical practitioner could give me any information as to the antecedents of the advertiser, as he is not on the register. He has now taken a house, and displays a brass plate with his name followed by "M.D." upon it, leading ignorant country people to believe he is a properly qualified medical practitioner. Surely it is time something was done by the Government, or the profession, to put a stop to impostors and quacks from so deceiving the public.—

I am, yours truly,

Grafton, N.S.W.,

August 23, 1889.

A. FORBES,

L.R.C.P., Edin.

[The person referred to has for some 20 years been earning a precarious livelihood as an unregistered medical practitioner in country districts in New South Wales. He, however, has failed to achieve favourable notoriety in the estimation of even the ignorant or stupid inhabitants of those districts. There are scores of similar cases in the colony, and, until the electors at a general election press upon the candidates for Parliament the necessity for giving effect to the recommendation of the Legislative Council, ignorant people will continue to be victimised by such men.—Ed. A.M.G.]

## THE MONTH.

## NEW SOUTH WALES.

FOURTEEN thousand four hundred and eight deaths occurred in New South Wales during 1888, viz., 8,453 males and 5,955 females, including 6,207 of children under five years of age (3,353 males, and 2,854 females). The deaths due to *zymotic diseases* were 2,143 (diarrhoea 676, typhoid 484, diphtheria 240, measles 218, scarlet fever 111, dysentery 108, cholera 88, syphilis 62, puerperal fever 38, &c.); *parasitic diseases* 53 (hydatid disease 22); *dietetic diseases* 183 (chronic alcoholism 102, &c.); *constitutional diseases* 2,111 (phthisis 1045, cancer 404, tabes mesenterica 237, &c.); *developmental diseases* 1,195 (old age 718, premature births 388, &c.); *local diseases* 6,543 (convulsions 664, apoplexy 239, inflammation of the brain 225, brain paralysis 173, heart disease 891, pneumonia 682, bronchitis 629, croup 210, enteritis 514, dentition 246, Bright's disease 140, accidents of childbirth 113, &c.); *violence*, 1140; and *ill defined and not specified causes*, 1040.

THE Berrima District Cottage Hospital at Bowral was opened on September 4. At a special general meeting of subscribers of the institution, Drs. Davidson, Middleton, Swinson and Wilson were elected medical officers, but Dr. Davidson declined to act.

THE new hospital at Cootamundra was opened by Lord Carrington on August 29.

THE newly established Children's Hospital at Lewisham, near Sydney, is now open for the reception of patients. Dr. McSwiney has been elected senior honorary physician, and Drs. Collingwood and Thring honorary surgeons of the institution.

THE Full Court, on August 26, granted a new trial in the case of *Davis v. Goode*, as far as the count for libel was concerned. The plaintiff, Miss Selina Ann Davis, had obtained a verdict for £100 against Dr. George Goode, who, as a honorary physician of the Orange hospital, had charged her with neglect and cruelty towards a number of the patients. When the Full Court, recently, was asked to grant a rule nisi, they did so, only as regards the count for libel, in respect of which half the damages had been awarded, and a new trial was now granted on the ground that the Chief Justice had excluded from the consideration of the jury certain evidence tendered by the defendant for the purpose of showing that in making the charges against Miss Davis he had not been animated by malice.

DR. ANDREWS, of Albury, has suggested the advisability of bringing under the notice of the Government the necessity of providing a system of quarantine for persons suffering from diphtheria.

DR. T. B. CLUNE, formerly of Hyde Park, has commenced practice at Crystal street, Petersham, a suburb of Sydney.

DR. J. L. DONOVAN, late of College street, Sydney, has commenced practice at Cooma, 257 miles S.W. of Sydney.

DR. CHARLES HEDLEY, late of Hamilton (Newcastle), has settled at Grafton.

DR. SYDNEY JAMIESON, son of Mr. John S. Jamieson, of the firm of Prince, Ogg, and Co., of Sydney, has been appointed Assistant-Professor of Pathology at the University of Edinburgh.

DR. A. J. W. KEENAN, late of Windsor, (Melbourne), and formerly of St. Vincent's Hospital, Sydney, has commenced practice at 40 College street, Sydney.

DR. G. L. L. LAWSON, prior to his departure for England, was presented by the Committee of the Balranald Hospital with an illuminated address, and by the residents of the district with another address and a purse of sovereigns.

DR. C. L. MACCARTHY has been appointed resident physician at St. Vincent's Hospital, Sydney.

DR. GUNTHER NAGEL, late assistant to Dr. Lee of Wollongong, has settled at Bingera, a small township 352 miles N.W. of Sydney.

DR. E. O. NEWLAND, formerly of the Wagga hospital, has commenced practice at Coonamble, 375 miles N.W. of Sydney.

DR. C. H. SOUTER, of Hillston, has been appointed member of the Licensing Court for the district.

WE regret to learn that Dr. Ashburton Thompson, Chief Medical Inspector of N.S.W. Board of Health, whilst engaged in inspecting the dairies in the Newcastle district, met with a severe accident on August 16, through being thrown out of a buggy.

DR. W. H. TIBBITS, of Manly (Sydney), has returned to the colony from his trip to the old country.

DR. R. H. TODD, late of College-street, Sydney, and Dr. H. H. Orr have succeeded to the practice of Dr. Hood at Maclean, on the Clarence river; Dr. Hood will shortly commence practice in Sydney, at 146 Phillip-street.

DR. W. C. WILLIAMSON, the Assistant Medical Officer of the Parramatta Hospital for the Insane, has been appointed Medical Superintendent of the Newcastle Hospital for the Insane; Dr. Williamson has also been appointed Government Medical Officer for the Port of Newcastle, *vice* Dr. Morgan resigned.

## NEW ZEALAND.

DR. F. S. DALDY, late of Horsham, Sussex (Eng.), has settled at Auckland.

DR. H. D. DAVENPORT has removed from Hastings to Woodville, 100 miles S.W. of Napier.

DR. S. O. GODFREY, late of St. Helier's (Jersey), has settled at Waipawa, 42 miles S.W. of Napier.

DR. L. E. IDELL, late of Waipawa, has commenced practice at Marton, 121 miles N. of Wellington.

DR. P. F. MONEY has removed from Ophir (Otago), to Denniston, near Westport, Prov. Nelson.

## QUEENSLAND.

THE annual dinner in connection with the Queensland Medical Society was held at the Masonic Hall, Brisbane, on Saturday evening, August 24, when there were about twenty-five gentlemen present. The guest of the evening was his Excellency Sir William Macgregor, M.D., K.C.M.G., Governor of New Guinea. The chair was occupied by Dr. Thomson, the president, and the vice-chair by Dr. W. S. Byrne. After the usual loyal toasts the president proposed the health of Sir William Macgregor. The toast was warmly received, and on the guest rising to reply he was heartily cheered. Sir William Macgregor gave an interesting account of his experiences in Fiji, which was listened to with great pleasure. Several songs were sung, and after an exceedingly pleasant evening the gathering broke up at about 11 o'clock.

A SURGEON is required for the newly-established hospital at Limestone, a new mining township about 40 miles from Maytown, in the Palmer Goldfields District; the population at present is about 500, but rapidly increasing. The salary is £350 per annum, with right of private practice. Applications must be sent to Mr. C. F. Nash, the hon. secretary, not later than the 30th September.

THE Queensland Assembly, on August 9, rejected, by 24 to 16, a motion by Sir Samuel Griffith in favour of the establishment of a Queensland University.

DR. FORBES, who for the past fifteen months has acted as Resident Medical Officer at the Brisbane General Hospital, has been appointed Medical Superintendent of the Charters Towers Hospital.

DR. J. B. HOGG, of the Woogaroo Asylum, has been appointed Medical Superintendent of the new asylum for the Insane at Toowoomba.

DR. E. S. JACKSON, Medical Superintendent of the Brisbane Hospital, who has been on a trip to England for the past fifteen months, has returned to Brisbane, and resumed his duties at the institution.

DR. L. KESTIVEN, the Government Medical Officer, has refused to comply with a request of the Chief Secretary to resign his position, for having shown favouritism to certain prisoners in Brisbane gaol. Dr. Kestiven wrote to the Chief Secretary, expressing the opinion that the latter had always endeavoured to get rid of him. Dr. Kestiven has now been dismissed and Dr. E. Tilston appointed his successor.

## SOUTH AUSTRALIA.

AFTER a series of disputes extending over eight years, Dr. George Bollen, of Port Adelaide, obtained on August 15, from Judges Boucaut and Bunday, sitting as the Full Court, a rule absolute for a *mandamus* directed to the Medical Board requiring them to place his name on the register of legally-qualified Medical Practitioners in the province. The qualifi-



cation is based on a diploma of the Hahnemann Medical College, Chicago, and for Dr. Bollen's right to practice medicine in the United States. Their Honors were of opinion that the Medical Board was not a discretionary body, and that on reasonable evidence that the applicant had a qualification provided for in clause 12 of the Medical Act of 1880, they were bound to admit him.

A MEETING of the S.A. Medical Board was held on August 26, when, in compliance with a *mandamus* of the Supreme Court, a certificate of registration was issued to Dr. George Bollen, of Port Adelaide. It was then unanimously decided by the members to send their resignations to the Government, as they could not conscientiously act under the present law.

THE S.A. Branch B.M.A. in Adelaide are about calling a meeting of the profession in S.A. to consider the present unsatisfactory condition of the laws regulating the practice of medicine in that colony. The S.A. Medical Board have recently resigned, declining any longer to administer an act which compels them, by a recent ruling of the Supreme Court, to register men who produce any American qualification. Dr. Bollen, whose persistent efforts have secured this result, holds, we believe, a degree from the Hahnemann College of Chicago—a document secured by “collegiate” methods which did not rob South Australia of his presence for more than about 15 months in all.

THE association of legally-qualified practitioners of South Australia have also got the matter in hand, and meet on the 20th inst. (Sept.) for its consideration.

THE Premier, Dr. Cockburn, an M.D. of London, has peculiar facilities for fully understanding and appreciating the universal desire of the profession in Australia for good medical legislation. Whether he intends to make his term of office memorable with his brethren throughout the colonies by carrying through a measure which shall secure in S.A. at least the safety and well-being of the sick and elevate the tone of the profession, is a question which will not, we hope, depend on the exigencies of party politics.

THE Annual Meeting of the S. A. Association of Registered Medical Practitioners will be held at the Adelaide Hospital (out-patients' department) on Friday, 20th September, 1889, at 8.30 p.m. At this meeting members will be asked to consider what attitude the Association shall adopt in connection with the late trial, “Bollen v. Medical Board of S.A.” The election of a President and Council for the ensuing year will also take place. Nominations for office and notices of motion to be sent to the Honorary Secretary. Members of the profession in South Australia who have not already joined the Association are requested to reconsider the matter. A single subscription of one guinea constitutes membership. Dr. Archibald A. Hamilton, of Angus street, Adelaide, is the Honorary Secretary of this Association.

DR. ROBERT HOWELL PERKS, M.D. Brux. (avec distinction) 1883; M. 1881, F. 1884, R.C.S. Eng.; L.R.C.P. Lond. 1882, of the Royal Albert Hospital, Devonport (Eng.), has been elected to the post of Medical Superintendent of the Adelaide Hospital; he is expected to arrive in the colony about the end of October.

DR. STOW, of Port Darwin, and Dr. Bovill, of Burdinde (Northern Territory), have left for England.

DR. P. M. WOOD, for the last five years Government Medical Officer of the Northern Territory, has resigned and will leave Palmerston for Melbourne on October 1.

## TASMANIA.

MR. JAMES LEVER, L.R.C.S. Ed. 1859, J.P., Assistant House Surgeon of the Hobart General Hospital, was found dead in bed on Sunday morning, August 18. The deceased gentleman was, at the time of his death, also Secretary of the Tasmanian Court of Examiners, and when he practised at Campbelltown some years ago, he acted as Medical Officer of the Campbelltown Hospital.

DR. R. G. SCOTT, a native of the colony, has been appointed House Surgeon of the Hobart General Hospital, in the place of Dr. Lever, deceased.

DR. CHARLES TURNER, late of Richmond, has commenced practice at Woodbridge (Peppermint Bay).

## VICTORIA.

NEARLY all the nurses in the Melbourne Hospital sent in their resignations owing to certain remarks made by Secretary Williams derogatory to the nursing in the institution, published in the *Argus* of August 24. Mr. Williams then explained that his remarks referred to the accommodation provided for them, and not with regard to the skill and ability they displayed in the exercise of their duties, when the nurses withdrew their resignations.

THE Government have decided to establish an inebriate retreat at Beaconsfield upon the model of the Belair Asylum, Adelaide. Mr. C. Williams, superintendent at Belair, is willing to accept the appointment if offered to him by the Victorian Government, to undertake the organisation of the retreat at Beaconsfield. The final arrangements, however, have not been made, nor have the details of the scheme been settled.

MR. CHARLES DRINKWATER, M.R.C.S. Eng., et L.S. A. Lond., 1886, L.R.C.P. Lond., 1887, of Nathalia, was found dead in bed, on August 31, with a bottle of chloroform alongside of him. It is supposed he tried to read himself to sleep, and, not succeeding, took chloroform. Being overpowered, he was unable to remove the handkerchief from his face, so he inhaled the poison till death ensued. He was found with his face lying on the handkerchief.

DR. J. AMESS, late of Tungamah, has commenced practice at 145 Church street, Richmond, (Melbourne).

DR. H. K. BEAN has settled at Heidelberg, 8 miles N.E. of Melbourne.

DR. JAMES KERR has settled at Orbost, 247 miles from Melbourne.

DR. AUGUSTUS LEWELLIN, late Medical Superintendent Melbourne Hospital, has commenced practice at East St. Kilda, a suburb of Melbourne.

DR. R. W. LEWERS has been appointed to the position of Assistant Resident Medical Officer in the Midwifery department of the Melbourne Women's Hospital.

DR. P. H. MAOGILLIVRAY, of Sandhurst, has been elected a corresponding member of the Royal Society of South Australia.

DR. SEMPLE, of Kilmore, had a narrow escape from being drowned on August 20, whilst crossing the Kurruc creek, which was very much swollen owing to heavy rains, and on reaching the centre, the horse was swept off its legs, and with the buggy was going down the creek. Dr. Semple, seeing the danger, jumped into the creek, and succeeded in reaching the bank, after a deal of exertion. The horse, however, was drowned.

DR. L. F. SHOWMAN has commenced practice at Ringwood, 16 miles from Melbourne.



DR. R. WILLMOT has removed from St. Kilda, to Violet Town, 106 miles N.E. of Melbourne.

DR. F. W. WINGROVE has removed from Eltham to Rapanyup, 214 miles N.W. of Melbourne.

### PROCEEDINGS OF COLONIAL MEDICAL BOARDS.

The following gentlemen, having presented their diplomas, have been duly registered as legally qualified Medical Practitioners, by the respective Boards:—

#### NEW SOUTH WALES.

Collins, Michael Joseph, L.R.C.S. Edin., 1882.  
Pigot, Edward Francis, M.B. & Ch.B. Univ. Dub., 1882.  
Daly, Charles Andrew, L. & L.M.D. K.Q.C.P. Irel., 1883; L.R.C.S. Irel., 1888.  
Kane, Robert English, L.R.C.P. Edin., 1886; L.R.C.S. Edin., 1886.

#### NEW ZEALAND.

Daldy, Frederick Samuel, M.R.C.S. Eng., 1887; L.S.A. Lond., 1889.  
Forbes, Francis Courtenay Sutherland, M.B. & Ch.M. Aberd., 1889.  
Godfray, Sydney Charles, M.B. & Ch.M. Edin., 1887.

#### TASMANIA.

Brevia, Robert Adams, M.B. & Ch.M., 1884; M.D., 1887, Edin.  
Reed, Henry Albert, M.R.C.S. Eng., L.R.C.P. Lond., L.S.A. Lond., 1885.

#### VICTORIA.

Kerr, James, M.B. & Ch.M. Edin., 1884.

Additional qualifications registered:—

Bean, Harold Knowles, Ch.M. 1880, M.D. 1884, Edin.

### MEDICAL APPOINTMENTS.

Anhe, William Conyngham, L.R.C.S. Irel., to be Government Medical Officer and Vaccinator for the district of Coonamble, N.S.W.

Broom, Charles, M.R.C.S. Eng., to be Health Officer for Dunmunkle Shire, N.R., Vic.

Kerr, James, M.B. & Ch.M. Edin., to be Public Vaccinator at Orboost, Vic.

Serjeant, George, M.R.C.S.E., to be Government Medical Officer and Vaccinator for the district of Balranald, N.S.W.

Todd, Robert Henry, M.D. & Ch.B. Dubl., F.R.C.S.L. Irel., to be Government Medical Officer and Vaccinator for the district of Lower Clarence River, N.S.W.

Willmot, Robert, F.R.C.S. Ed., M.R.C.S.E., to be Public Vaccinator at Violet Town, Vic.

Wingrove, Francis William, L.R.C.P. & R.C.S. Ed., L.F.P.S., Glas., to be Public Vaccinator at Rapanyup, Vic., vice Dr. J. C. Hood, resigned.

## BIRTHS, MARRIAGES, AND DEATHS.

\* \* The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcement.

### BIRTHS.

BROWN.—On the 24th August, at Maffra, Victoria, the wife of William Henry Brown, M.R.C.S., of a son.

COLE.—On the 26th August, at Carlton (Melbourne), the wife of F. Hobill Cole, M.B., B.S., of a daughter.

HUXTABLE.—August 12, at Sydney, the wife of L. R. Huxtable, M.B., of a daughter.

LITTLE.—On the 13th August, at Petrie's Bight, Brisbane, the wife of J. H. Little, M.B., of a daughter.

MACGILLICUDDY.—On the 10th August, at Richmond (Melbourne), the wife of Dr. D. F. MacGillicuddy, of a son.

MALLAM.—August 4, at Armidale, N. S. W., the wife of Dr. L. G. Mallam, of a daughter.

WILLIAMS.—On the 22nd August, at 57 Collins-street, Melbourne, the wife of Dr. J. Williams of a daughter (stillborn).

### MARRIAGES.

ADAM—FERGUSON.—On the 16th August, at the Scots Church, Melbourne, Basil J. Adam, M.B., C.M., to Isabella Byrne, youngest daughter of the late Francis John Ferguson, Esq., Glasgow.

CUNNINGHAM—GOODMAN.—On the 13th August, at Talbot, Victoria, by the Rev. John Nicol, Peter Hannah Cunningham, M.B., C.M., to Katie, eldest daughter of Mr. Wm. Goodman, both of Talbot.

GORRICK—MYLECHARANE.—August 21, at St. Mary's Waverley, Herbert Percy Critchett Gorrick, M.D., of Hillgrove, N.S.W., to Annie Jane Gardiner, second daughter of W. P. Mylecharane, of Waverley, Sydney.

HOWITT—YOUNG.—On the 15th August, at St. George's Church, East St. Kilda, Dr. Godfrey Howitt, Toorak (Melbourne), to Lily daughter of Charles Young, Windsor.

LONDON—RYMILL.—On the 26th August, at St. Paul's Church, Adelaide, Alfred Austin London, M.D., North-terrace, to Lucy Isabel, younger daughter of Henry Rymill, East-terrace, Adelaide.

### DEATH.

RYGATE.—August 18, at Grenfell, N.S.W., Arthur Edward, son of Dr. R. E. Rygate, aged 6 weeks.

WE have been requested to state that the 10th International Medical Congress will be held in Berlin, in August next. The Congress will be opened on the 4th, and closed on the 9th August, 1890. Any desired information can be obtained from the Committee, Drs. von Bergmann, Virchow, and Waldeyer, 19 Karl strasse, Berlin, N.W.

### VITAL STATISTICS OF AUSTRALASIA FOR 1888.

Colony.	Area in Square Miles.	Estimated Population on the 31st December.	Births.	Deaths.	Marriages.	Per 1,000 of the Population.		
						Births.	Deaths.	Marriages.
Victoria ... ..	87,884	1,090,869	34,503	16,287	8,946	32.49	15.34	8.42
New South Wales ...	309,175	1,085,740	38,525	14,408	7,844	36.20	13.54	7.37
Queensland ... ..	668,224	387,463	14,247	5,529	3,254	37.77	14.66	8.63
South Australia ...	903,425	318,308	10,510	3,759	2,084	33.06	11.83	6.56
Western Australia...	975,920	42,137	1,518	673	304	35.88	15.91	7.18
Total Australia ...	2,944,628	2,924,517	99,303	40,656	22,432	34.68	14.20	7.84
Tasmania ... ..	26,375	146,149	4,777	2,036	951	33.10	14.11	6.59
New Zealand ... ..	104,235	607,380	18,902	5,708	3,617	31.22	9.43	5.97
Total Australasia ...	3,075,238	3,678,046	122,982	48,400	27,000	34.03	13.39	7.47

## REPORTED MORTALITY FOR THE MONTH OF JULY, 1889.

Cities and Districts.	Population.	Births Registered.	Deaths Registered.	Deaths under Five Years.	Number of Deaths from									
					Measles.	Scarlet Fever.	Group and Diphtheria.	Whooping Cough.	Typhoid Fever.	Dysentery and Diarrhoea.	Phthisis.	Heart Disease.	Cancer.	Child-bearing.
<b>N. S. WALES.</b>														
Sydney .....	132,846	897	175	62	...	2	7	...	7	3	22	18	4	2
Suburbs .....	215,849	917	295	110	...	1	16	4	9	2	27	15	14	6
<b>NEW ZEALAND.</b>														
Auckland .....	85,858	63	20	3	...	1	...	...	...	1	1	1	...	...
Christchurch .....	16,455	18	9	...	...	...	1	...	...	...	1	1	...	...
Dunedin .....	23,546	49	30	2	...	...	...	...	...	...	1	5	3	2
Wellington .....	29,075	87	31	10	...	...	3	...	1	...	...	3	2	1
<b>QUEENSLAND.</b>														
Brisbane .....	51,689	224	81	32	} ...	...	9	2	4	7	16	3	1	3
Suburbs .....	21,960	121	35	20										
<b>SOUTH AUSTRALIA.</b>														
Adelaide .....	312,813	...	...	...	...	...	...	...	...	...	...	...	...	...
Adelaide .....	48,750	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TASMANIA.</b>														
Hobart .....	34,734	88	68	11	...	...	1	...	3	...	7	9	4	...
Launceston .....	21,894	70	35	6	...	...	2	...	1	...	2	3	...	...
Country Districts .....	147,664	270	72	...	...	...	2	...	1	1	...	...	...	...
<b>VICTORIA.</b>														
Melbourne .....	75,400	168	130	} 313	1	2	71	22	17	5	98	69	24	9
Suburbs .....	362,385	1413	721											

## METEOROLOGICAL OBSERVATIONS FOR JULY, 1889.

STATIONS.	THERMOMETER.				Mean Height of Barometer.	RAIN.		Mean Humidity.	Prevailing Wind.
	Maximum Sun.	Maximum Shade.	Mean Shade.	Minimum Shade.		Depth.	Days.		
						Inches			
Adelaide—Lat. 34° 55' 33" S.; Long. 138° 36' E. ....	...	...	...	...	...	...	...	...	...
Auckland—Lat. 36° 50' 1" S.; Long. 174° 49' 2" E. ....	118.	65.	52.1	40.	...	4.380	22	80	...
Brisbane—Lat. 27° 28' 3" S.; Long. 153° 16' 15" E. ....	134.4	76.	58.9	37.2	30.142	8.464	12	73	s.
Christchurch—Lat. 43° 32' 16" S.; Long. 172° 38' 59" E. ....	116.	64.	41.9	28.2	...	1.650	13	78	...
Dunedin—Lat. 45° 52' 11" S.; Long. 170° 31' 11" E. ....	97.	55.	40.9	27.	...	1.550	8	83	...
Hobart—Lat. 42° 53' 32" S.; Long. 147° 22' 20" E. ....	...	60.3	47.3	33.5	30.136	1.99	7	83	...
Launceston—Lat. 41° 30' S.; Long. 147° 14' E. ....	...	60.9	45.6	28.	30.206	0.97	5	91	...
Melbourne—Lat. 37° 49' 54" S.; Long. 144° 58' 42" E. ....	...	62.1	47.8	31.3	30.158	1.64	8	...	...
Sydney—Lat. 33° 51' 41" S.; Long. 151° 11' 49" E. ....	...	64.4	52.5	41.6	30.239	8.91	21	79	S.W.
Wellington—Lat. 41° 16' 25" S.; Long. 174° 47' 25" E. ....	108.	58.5	46.9	33.	...	3.145	16	76	...









NB785.







N 3785.

